

TB 43-PS-707, The Preventive Maintenance Monthly, is an official publication of the Department of the Army, providing information for all Soldiers assigned to combat and combat support units and all Soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user. Masculine pronouns may refer to both genders. The use of product or company names does not constitute endorsement of those products, services or companies by the U.S. Army.

ISSUE 707 OCTOBER 2011



COMBAT VEHICLES

Stryker Fuel Leaks
M2/M3-Series Bradley Shutdown Reminder
M1-Series Tank Brake Levers
M113-Series FOV Ramp Safety
CVC Helmet Headset Dryness
M109 Howitzer, M992A2 Air Box Cleaning
M109A6 Paladin Fuel Cap Gasket Check



WHEELED VEHICLES

HMMWV Turret Tarp NSNs
FMTV Air Springs Inflation
HEMTT -A4 Load Testing
M1074P/M1075P1 PLS STE-ICE Wiring Harness
Lead-Acid Batteries Testing, Charging, Disposal



MRAP/ROUTE CLEARANCE

Talon 3B Robot Track Adjustment
MRAP Rollover Avoidance



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M260/M261 Rocket Launcher Maintenance Tips
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You are invited to send PS your ideas for improving maintenance procedures, questions on maintenance and supply problems and questions or comments on material published in PS.

Just write to:

MSG Half-Mast
PS, the Preventive Maintenance Monthly
USAMC LOGSA (AMXLS-GP)
5307 Sparkman Circle
Redstone Arsenal, AL 35898

Or email to:

logsa.psmag@conus.army.mil or
half.mast@us.army.mil

Internet address:

<https://www.logsa.army.mil/psmag/pshome.cfm>

By order of the Secretary of the Army:

RAYMOND T. ODIERNO
General, United States Army Chief of Staff

Official:



JOYCE E. MORROW
Administrative Assistant to the Secretary of the Army

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Issue 707

PS

October
2011

THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-707

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Unlimited



IF HE SURVIVES...
HE HAS MUCH TO
LEARN ABOUT
PREVENTIVE
MAINTENANCE BEFORE
FACING FUTURE
ENEMIES!

Will he survive?
Will he learn?
Find out on page 27!

Give Equipment A Good Once-Over

HEY, YOU'RE RIGHT FROM **RESET** AND YOU LOOK **GREAT...**

OH BOY! NOT ONLY DOES THAT BLACK HAWK GET TO GO THROUGH **RESET** BUT IT ALSO GETS A THOROUGH INSPECTION.

IF ONLY **I** WAS AS FORTUNATE.

...BUT I'M GOING TO CHECK YOU OUT ANYWAY.

Most Soldiers are very familiar with the Army's Reset program that puts equipment back into mint condition.

Whether it's radios, aircraft, tanks or weapons, everything gets torn apart.

During Reset, every part of an end item has hands laid on it. Everything is laid bare down to the nuts, bolts, screws and wiring so that the components and hardware can be either repaired, replaced or refurbished.

At some point—unlike Humpty Dumpty who couldn't be put back together again—your equipment is put back together in like-new condition. After it is cleaned, refurbished, and repaired, your equipment is put back in the Army inventory.

Because so many things can happen during Reset, it's a good maintenance practice to do a thorough inspection of equipment that has gone through Reset.

For example, on aircraft you might want to look for loose rivets or connectors, FOD, or anything else that could have been mistakenly left behind in areas with moving parts.

When you get equipment back from Reset, always take the time to thoroughly perform the PMCS called for in the TM. That way you know your equipment is in mint condition.

[Click here for a copy of this article to save or email.](#)



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Stryker...

Stop Fuel Leak at Its Source



NOTICED A FUEL SMELL IN THE CREW COMPARTMENT OF YOUR STRYKER LATELY?

YOUR VEHICLE COULD BE ONE OF SEVERAL WITH A LEAKING C7 FUEL DISTRIBUTION ASSEMBLY (FDA).

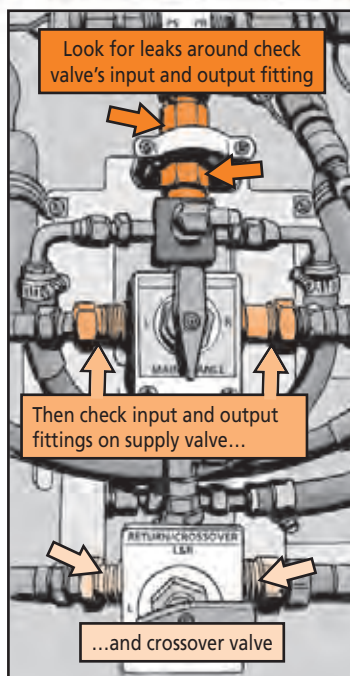
DON'T WAIT AROUND. CHECK IT NOW!

The majority of the leaks appear at the input and output fittings on the FDA's check valve. But you also need to eyeball the input and output fittings for the supply and crossover valves. All three of these valves are made of brass and are prone to stress corrosion cracks that let fuel leak out.

If enough fuel builds up under the floor plates, you and other crewmembers can be exposed to concentrated fuel vapors that can make you sick.

Before you inspect, be sure to drain the hull following the general cleaning instructions in your vehicle's -10 manual. If no leaks are found, continue your mission. But make sure you check the valves regularly as part of your before-operation PMCS. If you find a leak, tell your mechanic.

He'll contact General Dynamics Land System (GDLS) Contractor Logistics Support (CLS). They'll send a CLS team to remove and replace the leaking C7 FDA with a new, stainless steel version.



For help locating your GDLS CLS, contact Chris Spall or John Tippet:

spallc@gdls.com or tippet@gdls.com

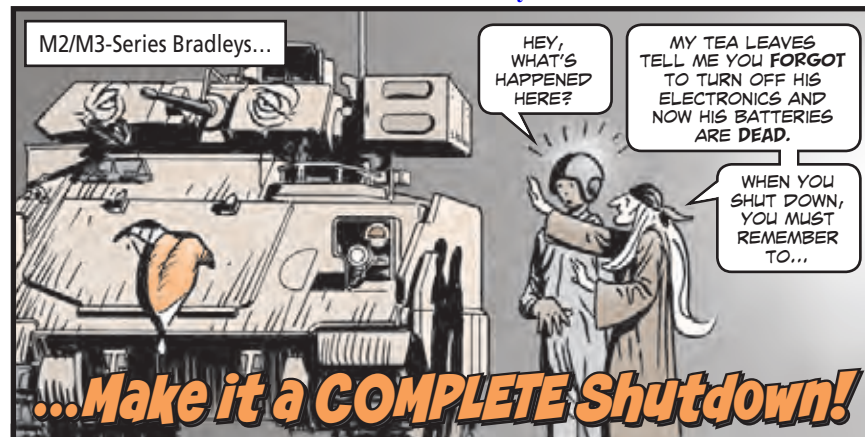
Check out the complete scoop in TACOM GPA 11-011:

https://tulsa.tacom.army.mil/safety/gpm/tacom_wn/gpa11-011.html

You can also download a complete list of Stryker vehicles with C7 engines by their vehicle identification numbers. Just email Half-Mast:

half.mast@us.army.mil

M2/M3-Series Bradleys...



...Make it a COMPLETE Shutdown!

The mission is finally over and you want to grab a quick shower before heading to the chow hall. But before you crawl out of your Bradley, think a second.

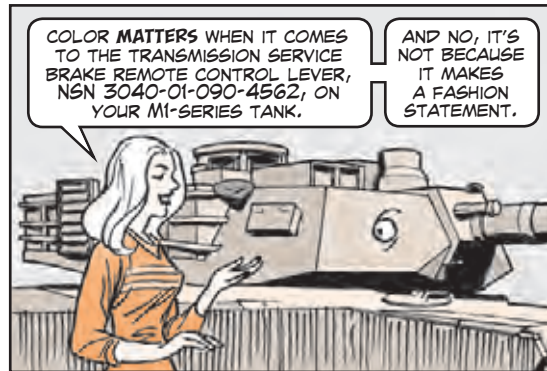
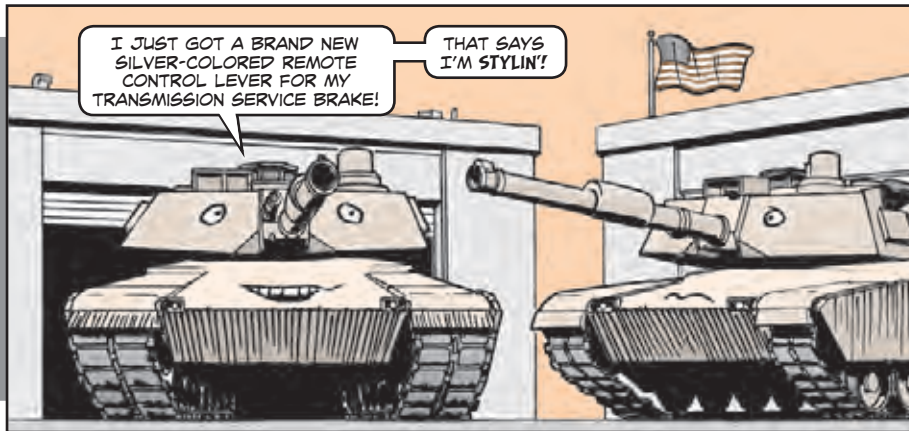
Did you remember to turn off the radios? How about the lights and other electronic gear?

If you forget, those items can still pull power from the batteries. And if your vehicle sits a while, you might come back to dead batteries.

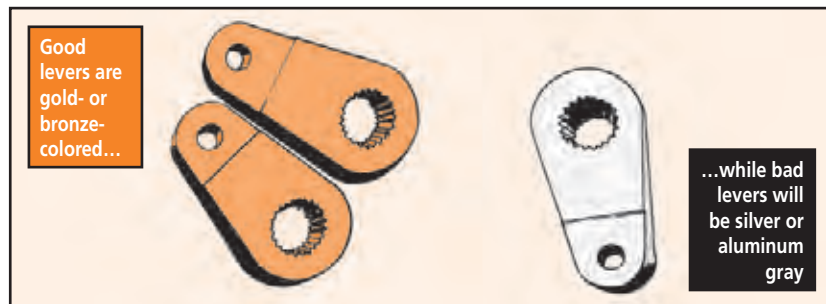
Even worse, you might not notice that the radios were left on. And if you start the engine with the radios on, a power spike could damage them.

So don't forget: A complete shutdown includes all electronics, too.

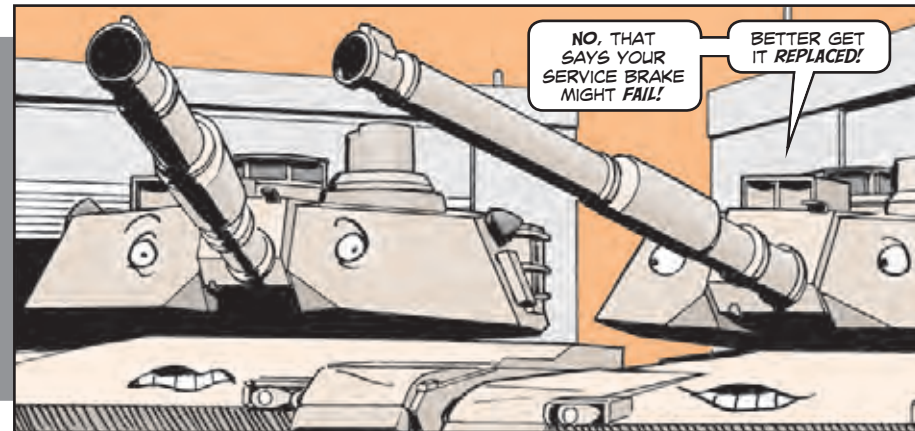
GO FOR THE GOLD



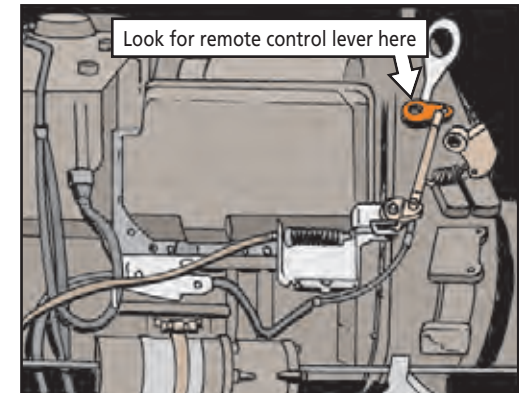
During the vehicle manufacturing process, workers noticed that some of the levers in their parts bins were silver or aluminum gray rather than the normal gold or bronze color. After the odd-colored levers were analyzed, it was found that they did not meet hardness specifications.



WITH BRAKE LEVER



Most of the levers were purged at the manufacturing facility, but it's possible that a few may have been installed. It's unlikely the softer levers will break, but a failure would lead to the loss of service brakes. So inspect your tank now. Just open the cooling fan access door on the right side of your tank and look for the lever between the right cooling fan assembly and the exhaust duct.



If the lever is gold or bronze, you're good to go. If a silver or aluminum lever is found, ask your mechanic to replace it.

Mechanics, order a replacement lever through normal supply channels using a priority level of 02. To expedite receipt of the replacement lever, overnight shipping is available by contacting the Defense Logistics Agency (DLA) Call Center at 1-877-DLA-CALL (1-877-352-2255) or DSN 661-7766. For OCONUS callers, the DSN is 312-661-7766.

To get credit, submit a Product Quality Deficiency Report (PQDR) against TACOM contract W56HZV-07-C-0224. You can start the PQDR process at:

<http://www.nslcptsnh.csd.disa.mil/webpqdr/webpqdr.htm>

For more information, check out TACOM GPA 11-014:

http://tulsa.tacom.army.mil/safety/gpm/tacom_wn/GPA11-014.html

M113-Series
FOV...

Slippery When WET



WATCH
THAT
FIRST
STEP!

IT'S A
SLIPPERY
ONE!

The ramp on your M113-series vehicle is made to load and off-load troops quickly and safely. But safety goes out the window if the ramp's nonslip coating is in bad shape.

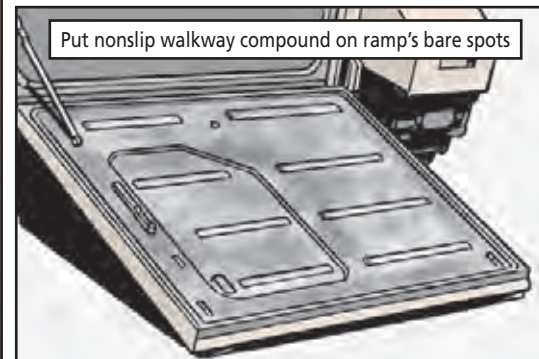
FOOTING GETS A
LITTLE TRICKY WHEN
THE SURFACE IS WORN.
IN WET WEATHER, IT
CAN BE DOWNRIGHT
DANGEROUS.

IF THE RAMP
SURFACE ON
YOUR CARRIER IS
DOWN TO BARE
METAL, FIX IT
LIKE THIS...



1. Wash the surface thoroughly with soap and hot water. Use a general purpose scrub brush to remove dirt, grease and loose paint. Rinse with hot water to further cut grease and oil.
2. Let the ramp dry completely.
3. Apply CARC primer to the bare metal surface. Instructions for applying the primer start on Page 8 of TB 43-0242, *WD CARC Spot Painting*. You'll find a list of primer NSNs in App B. Depending on the primer you choose, it will need to dry anywhere from 2-6 hours.

4. Use a paint brush to apply nonslip walkway compound to all the primed areas. NSN 8010-01-527-4055 gets a gallon of tan walkway compound. Instructions for applying the compound start in WP 0010 00-6 of TM 43-0139, *Painting Instructions for Army Materiel*.



Put nonslip walkway compound on ramp's bare spots

5. After the nonslip compound has dried, apply a topcoat of WD CARC paint. Application instructions start on Page 9 of TB 43-0242. Choose the type and color WD CARC paint from the list in App B.
6. Allow the WD CARC to dry for at least 6 hours before stepping on it.

YOU CAN ACCESS
TB 43-0242 AND
TM 43-0139 AT
THE LOGSA ETM
WEBSITE:
<https://www.logsa.army.mil/etms/>



CVC Helmets...

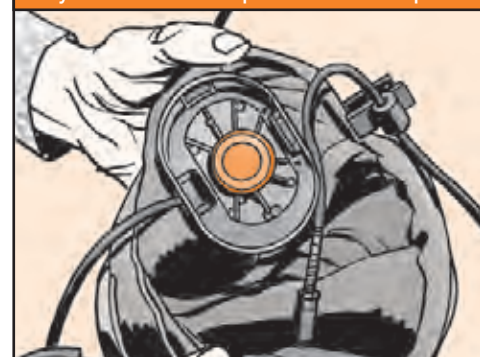
Keep Headset High and Dry

It stands to reason, crewmen: Water and electronics don't mix. So how you treat the headset in your CVC helmet has a lot to do with how well it works when you need it.

If you leave your helmet lying around, it'll probably get wet the next time you clean your vehicle. The earphones are very sensitive to water.

So when the mission's complete, take your helmet with you or store it in a place where it won't get wet.

Stray wash water can seep inside headset earphones



Air-Box in Need of Cleaning

MAN, THAT WAS A **COUGH!** LONG MISSION!

MY AIR BOX COULD USE **WHEEZE!** A GOOD CLEANING!

THEY TOOK CARE OF MY AIR BOX AS SOON AS WE GOT BACK!

IT MAKES **ALL** THE DIFFERENCE!

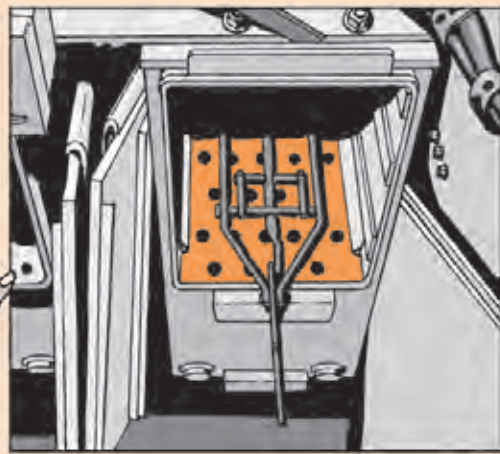
If you don't keep on top of them, dirt and dust have a funny way of building up fast. A quick look inside the air cleaner boxes in your howitzer or ammo carrier provides all the proof you need.

That's because dust and grit collect all over the boxes even under the best conditions. If you're deployed, that dirt, sand and dust collect a whole lot faster. When that happens, the air induction system exhaust fans just can't remove all the dust and grit.

So, next time you pull the air filters for cleaning, clean the air boxes, too.

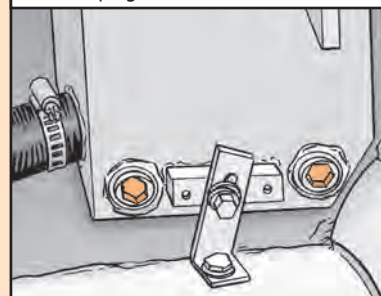
AFTER REMOVING THE AIR FILTER, FOLLOW THESE STEPS...

1. Clean out any dirt on the panel under the air filter.

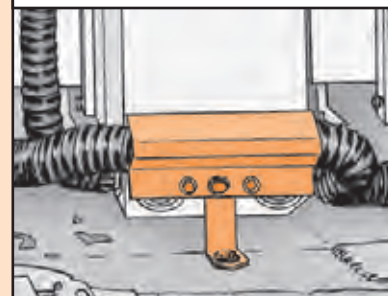


2. Open the two plugs at the base of each air box and blow out all the dirt and sand with low-pressure air—no more than 30 psi. You'll have to remove the blower motor hose bracket to get to the plugs on the Paladin's left air box.

Remove plugs and blow out sand and dirt



Remove bracket from Paladin air box



3. If the dirt and sand have hardened—which is what happens if water gets mixed in—you'll probably have to break up the mess with a screwdriver or chisel before blowing it out. Be careful not to damage the bottom of the air box, though.

Never clean the boxes by hosing them out with water. That leads to rust, which causes even more clogging problems.

M109A6 Paladin...

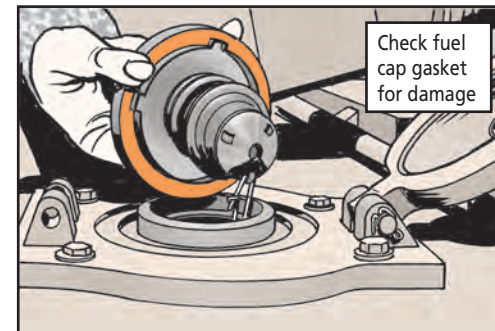
REFUELING? CHECK THE GASKET!

Crewmen, when it comes to the fuel cap on your M109A6 Paladin, it's all about the seal.

Taking the cap off and on, exposure to the elements, and just plain old age take a toll on the rubber gasket on the underside of the fuel cap. When the gasket wears out, it no longer creates a good seal between the fuel cap and the filler neck rim.

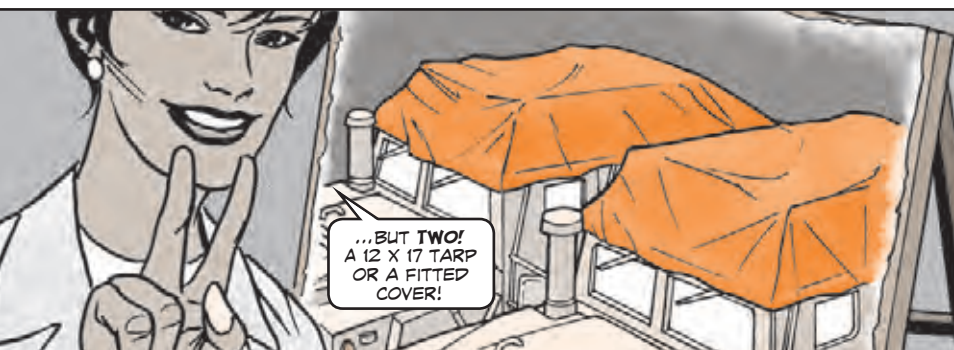
That can let water and dirt seep into the fuel cells. And here's a news flash: The engine won't burn water or dirt very well.

So take a good look at the fuel cap gasket whenever you refuel. If the gasket is torn, cracked or just plain worn out, replace the fuel cap. A new cap comes with NSN 2590-00-798-4056.



Check fuel cap gasket for damage

Turret Tarp NSNs



Dear Half-Mast,

On Page 11 of PS 699 (Feb 11), you recommended that we cover our HMMWV turrets with a tarpaulin, NSN 4610-00-442-9736, to keep rain and snow from flooding inside the vehicle. But FED LOG shows the NSN you gave us is a terminal item. What's a good replacement?

CW2 J.H.

Dear Chief J.H.,

Sorry about that. We've got two options for you.
NSN 2540-00-587-2532 brings a 12x17-ft tarpaulin.
Or you can order a fitted cover with NSN 2540-01-330-6177.

Half-Mast

KEEP AIR SPRINGS INFLATED

DRIVERS, YOU'RE IN FOR A **ROUGH** RIDE IN YOUR 2 1/2- OR 5-TON FMTV IF YOU DON'T KEEP THE VEHICULAR AIR SPRINGS INFLATED.



A few well-intentioned operators believe they have to deflate both air springs before tilting the truck's cab. Problem is, they forget to re-inflate them when they finish the work. That presents problems.

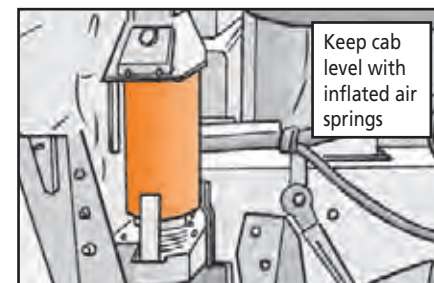
With no air, the cab isn't level. Bumps and jars during operation can make the springs pinch the bag. A damaged bag won't hold air, causing your backside to suffer big time on a bumpy road.

If the air springs on your truck are flat, re-inflate 'em. The panel's a little misleading. Just press and turn the CAB knob on the hydraulic manifold control panel to the right.

There's only one situation when you need to deflate the air springs, and that's when you're preparing your FMTV for air transport. **So leave 'em alone at all other times.**

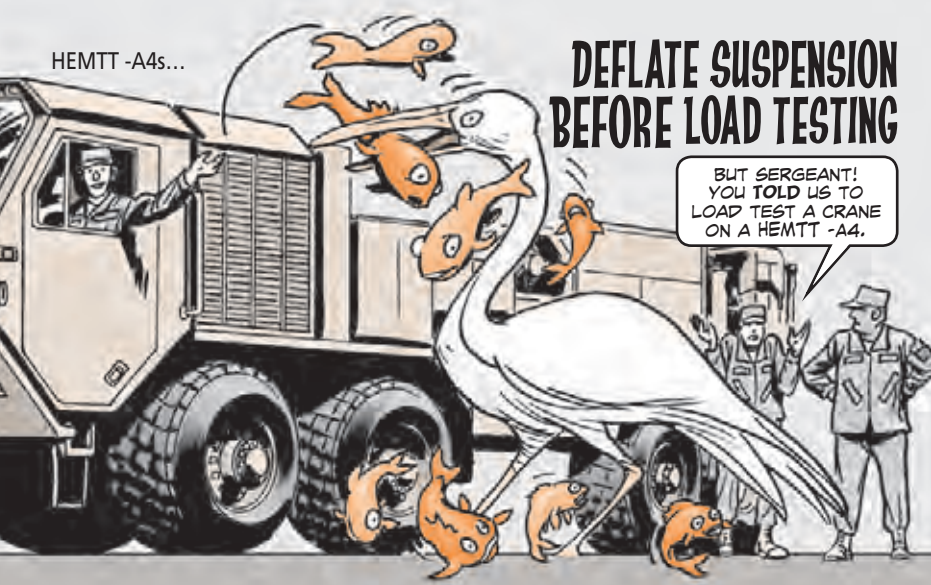
And if you have to replace the air springs, order them using NSN 2510-01-481-7663 and NSN 2510-01-481-7651. Use your parts manual as a guide.

Both air springs on basic and -A1 model FMTVs (serial numbers under 100,000) can be repaired by replacing the air bag. To order the air bag, use PN PP997900 with CAGE 26952. An NSN will be assigned later. Cab air bags aren't on -A1R model FMTVs (serial numbers 100,001 and higher).



DEFLATE SUSPENSION BEFORE LOAD TESTING

BUT SERGEANT! YOU TOLD US TO LOAD TEST A CRANE ON A HEMTT -A4.



You want your equipment to work, but that doesn't always happen. And if you've tried load testing a crane on your HEMTT -A4, you might have experienced this!

Troops have found that load testing a crane on a HEMTT -A4 leads to the suspension air bags inflating and raising the load. This makes it impossible to measure the drift of the load during the test.

Avoid this problem by following these updated load test procedures that will be added to your HEMTT -A4 IETM, EM 0288:

When you set up the crane, under the "Prepare Crane For Operation" section of the IETM, make sure you dump the suspension air before setting up the outriggers. Go to the "Operator" section of the IETM and find the procedure to "Operate Air Suspension Dump Valve." Follow those instructions.

Once you've finished operating or load testing the crane, inflate the suspension after stowing the outriggers.

That means the SPNSN AIR LOW indicator light, located to the right of the speedometer and above the transmission oil temperature gauge, should be OFF before you move the HEMTT. This is important because if you operate the HEMTT without the suspension inflated, you could damage the truck.



Follow IETM instructions for operating air suspension dump valve

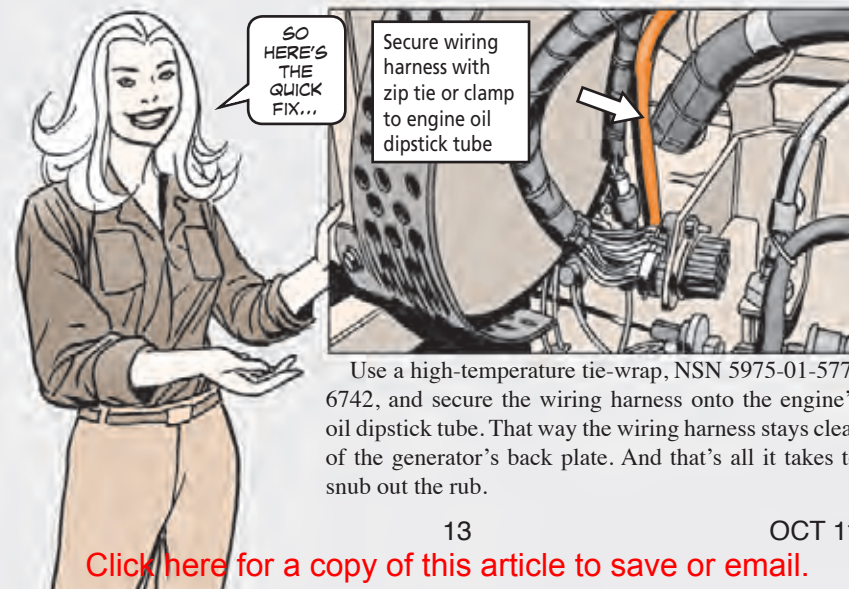
SNUB THE RUB

HEY... WHAT HAPPENED TO MY STE-ICE? IT WAS WORKING A MOMENT AGO!



The STE-ICE wiring harness on new and rebuilt PLS engines is getting a raw deal. That's because the harness can rub against the rotating back plate of the engine's 200-amp generator.

Enough rubbing wears away the insulation and exposes the wiring. That causes an electrical short in the vehicle's diagnostic system. A short means no STE-ICE!



Use a high-temperature tie-wrap, NSN 5975-01-577-6742, and secure the wiring harness onto the engine's oil dipstick tube. That way the wiring harness stays clear of the generator's back plate. And that's all it takes to snub out the rub.

SAVING GOOD BATTERIES

WOW! LOOK AT ALL THESE UNSERVICEABLE BATTERIES!

I'M NOT UNSERVICEABLE!

YEAH, ME NEITHER!

What do you do when your vehicle's lead-acid battery, NSN 6140-01-485-1472, doesn't work? Just turning it in as unserviceable is one choice, but not the right one! The right choice is to test it first to make sure it really *is* unserviceable.

Save your unit the cost of new batteries by testing them when you think they could be bad. Turn them in only when testing shows they are bad.

TESTERS

A conductance tester, such as the Pulse Tech (PT) 490 conductance tester is very sensitive. It can find defects or battery weaknesses long before any problem or capacity loss appears.

PT 490 Conductance Tester, NSN 6130-01-510-9594

But the PT 490 can't analyze the condition of a battery pack if it is connected in parallel; you need to isolate each battery. Use the MDX 700P HD conductance tester.



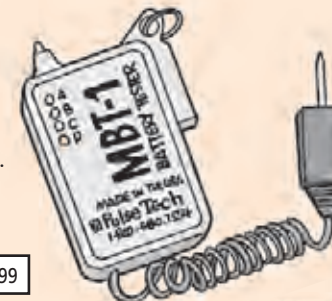
Midtronic's MDX 700P HD replaces Micro 700 Series conductive tester, NSN 6625-01-477-4704



THE TEST EQUIPMENT YOU NEED IS IN THE STANDARD AUTOMOTIVE TOOL SET (SATS). YOU CAN ALSO ORDER INDIVIDUAL TESTERS.

And the mini battery tester (MBT-1) is a micro-ohm load tester designed as a diagnostic tool for the operator. A fixed post positive connector and coil cord moveable negative connector make checking multiple batteries easy and fast.

MBT, NSN 6130-01-463-8499



LOAD TESTERS INDICATE THE BATTERY'S ABILITY TO HOLD ITS VOLTAGE WHILE UNDER LOAD. MAKE SURE YOU READ THE OWNER'S MANUAL FOR LOAD TESTERS BEFORE USING THEM. OTHERWISE, YOU MIGHT GET INCORRECT RESULTS.

FULLY CHARGE THE BATTERIES **BEFORE** PUTTING THEM INTO SERVICE. RECHARGE THE BATTERIES **AFTER REMOVAL** IF YOU'RE GOING TO STORE THEM. YOU DON'T HAVE TO RECHARGE THE BATTERIES IF THEY ARE HEADED TO DLA DISPOSITION SERVICES.



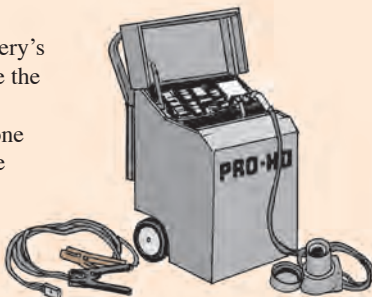
CHARGERS



HERE ARE YOUR CHARGING OPTIONS...

The Pro-4HD charger automatically selects 12 or 24 volts. It senses the battery's condition and provides only the voltage the battery can accept.

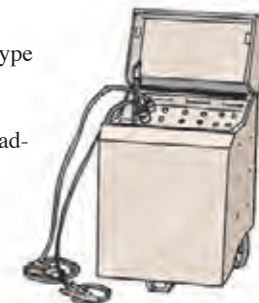
It comes with two charging cables: one for the NATO slave connection and one with alligator clamps.



Pro-4HD charger, NSN 6130-01-500-3401

The pallet charger is a 12-volt, 12-station charging unit. This charger can connect to any type or size of 12-volt vehicular battery.

Each charging station on the charger works independently. That way, any combination of lead-acid batteries can be charged at the same time.



Pallet charger, NSN 6130-01-532-7711



Pulse Charger World Version Plus, NSN 6130-01-477-4703

The Pulse Charger World Version Plus is a 12-volt only charger; on the back it has a manual switch for battery types. It comes with alligator clamps, so it should only be used on batteries that have been removed from your vehicle.

The Associated PP-1660 Type F charger charges both 12-volt and 24-volt batteries. It has two charging cables: one for the NATO slave connection and one with battery clamps. This charger was issued with the early SATS.



Associated PP-1660 Type F charger, NSN 6140-01-518-7866

DISPOSAL

BATTERIES ARE CONSIDERED HAZARDOUS MATERIAL...

SO MAKE SURE YOU FOLLOW HAZARDOUS MATERIAL DISPOSAL PROCEDURES OUTLINED BY THE TECH MANUAL AND STATE, FEDERAL AND LOCAL HOST NATION LAWS.

ALSO, USE DA PAM 200-1, ENVIRONMENTAL PROTECTION AND ENHANCEMENT, AS A RESOURCE.

YOU'LL FIND THE HQDA GUIDANCE IN ALARACT MESSAGE NUMBER 100311741/AMHS DTG 031826Z MAY 10. YOU CAN SEARCH FOR ALARACTS ON AKO. YOU CAN ALSO VIEW IT ONLINE USING THIS LINK:

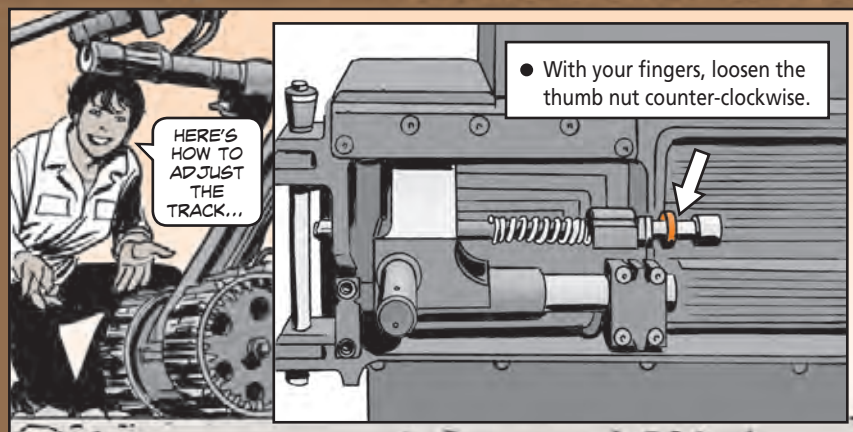
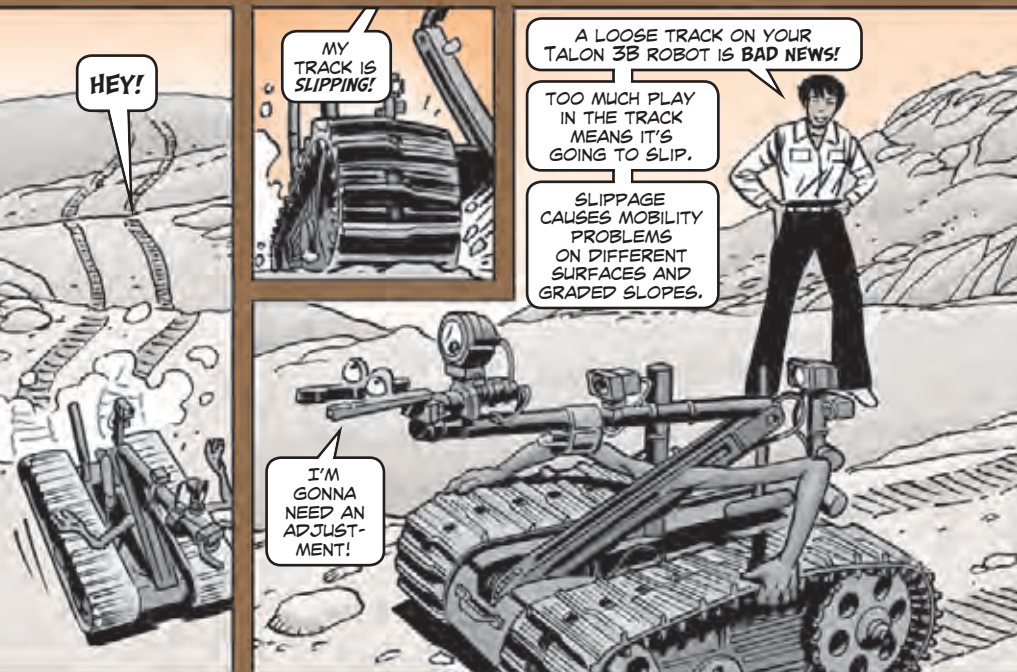
<https://www.us.army.mil/suite/page/550282>

FOR MORE ASSISTANCE, CONTACT LTC PENNY TONIOLLI. CALL HER AT 703-697-0556, DSN 227-0556, OR E-MAIL:

penny.toniolli@us.army.mil

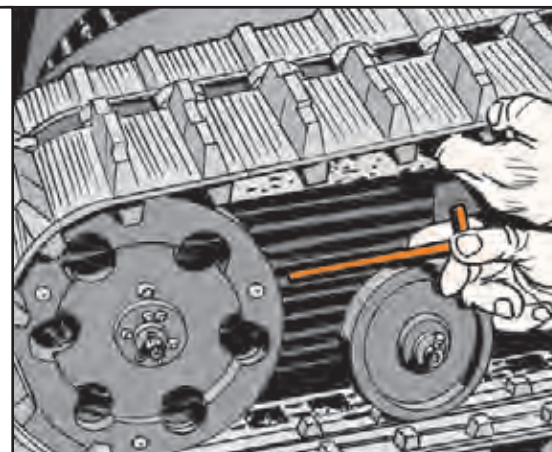
PS END

Avoid Loose Track



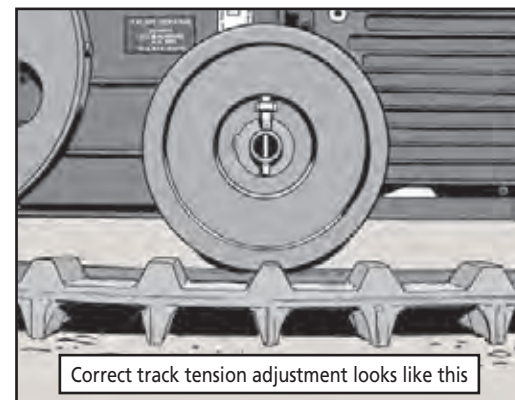
- Lift the chassis or turn it on its side so the track is freely suspended.

- Using a $\frac{5}{16}$ -in hex wrench, set the track tension by turning the tensioner screw counter-clockwise until the bottom edge of the small idler wheel is halfway between the track guide lugs. Make sure you check for any movement of the large idler wheel. There should be no lateral (forward and backward movement) of the wheel.



- Using your fingers, tighten the thumb nut by turning it clockwise to lock it into position. Do **not** overtighten the track's tensioner screw or you'll shear its cotter pin.

Use the same procedure for the other side. How well the robot steers and drives depends on the relative tension between the left and right track. So be sure to adjust each track to the same tension.

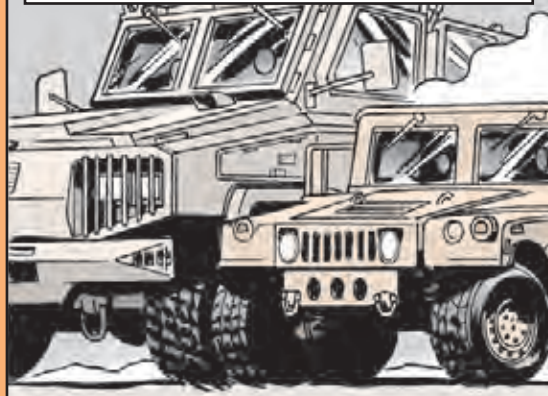


AVOID ROLLOVERS

TO HELP END
VEHICLE ROLLOVERS,
KEEP THESE LESSONS
LEARNED IN MIND
BEFORE YOU START
THE DAY'S MISSION...

- Perform rollover drill rehearsals with the gunner and crew prior to all missions
- Keep all mission equipment properly stowed
- Maintain appropriate speed for road conditions
- Make sure your crewmembers wear seat belts or their Gunner's Restraint Systems (GRS)
- Use a ground guide when tactical conditions permit
- Unlock combat door locks in a non-conflict situation. That way, rescuers can enter an unlocked vehicle if needed

WHEN PLANNING MISSION ROUTES USING COMPOSITE
RISK MANAGEMENT, REMEMBER THAT MRAP
VEHICLES HAVE **LARGER** PROFILES AND WEIGH **MORE**
THAN THE VEHICLES THEY REPLACED IN THEATER.



ALSO TAKE INTO
ACCOUNT THE MISSION'S
CRITICALITY, AS WELL AS
WEATHER AND TERRAIN.



TROUBLE-FREE TROUBLESHOOTING

LOOK
EVERYONE!
IT'S THE
TROUBLE-
SHOOTER!

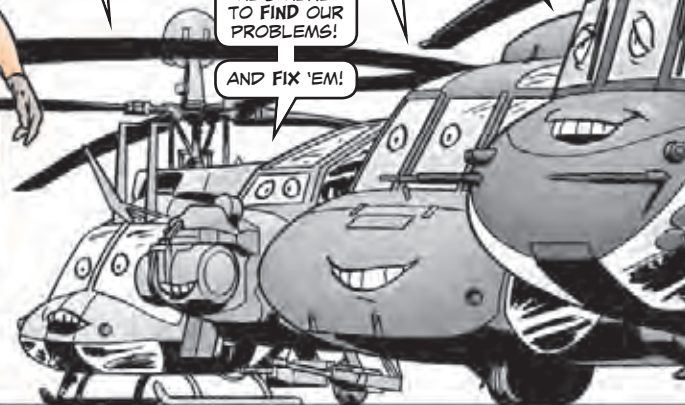
OUR
HERO!

HE'S GONNA
TAKE OUR
TROUBLES
AWAY!

COOL!

HE'S HERE
TO FIND OUR
PROBLEMS!

AND FIX 'EM!



Mechanics, doing a thorough job of troubleshooting prevents the unnecessary replacement of components and parts on your aircraft.

If you have problems with a component or aircraft system, troubleshoot it from beginning to end like it says in the TM. This will help you identify exactly what the problem is. It may also help you find faults you can fix without sending components to the support shop.

Don't ignore troubleshooting even when you think it's a waste of time. Troubleshooting can identify the problem and reduce the hours support needs to spend looking for and fixing a minor problem on a component you turned in as bad.

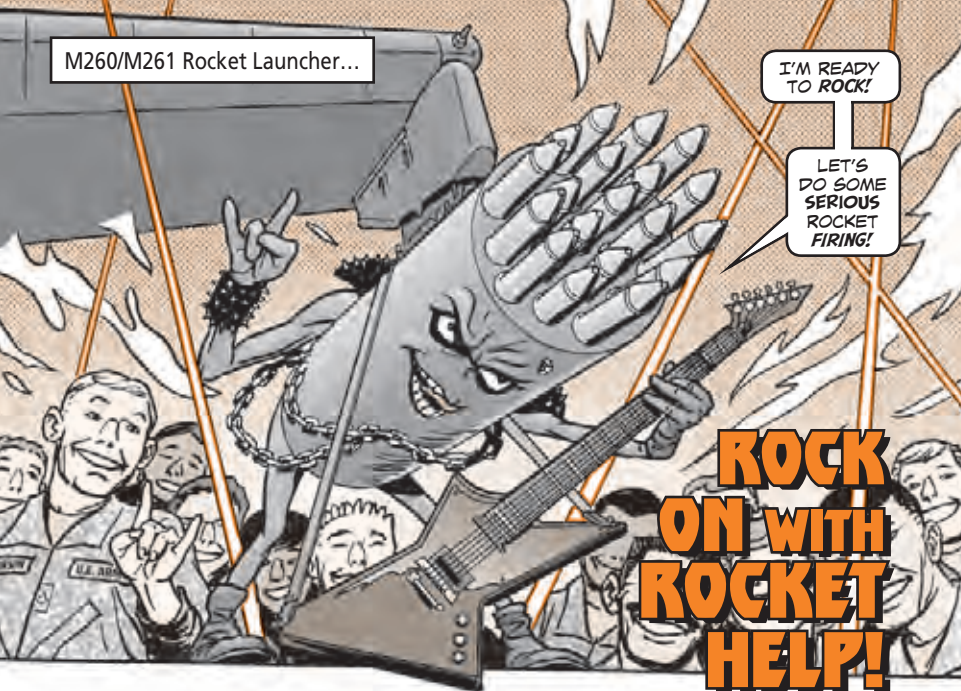
IF YOU DON'T TROUBLE-
SHOOT **THOROUGHLY** YOU'LL
END UP UNNECESSARILY
SPENDING MONEY AND
REPLACING PARTS.

SO **END** YOUR
TROUBLES BY
TROUBLESHOOTING
THOROUGHLY LIKE
YOUR TMS SAY.



BE A HERO TO YOUR AIRCRAFT... BE A TROUBLESHOOTER!

M260/M261 Rocket Launcher...



ROCK ON WITH ROCKET HELP!

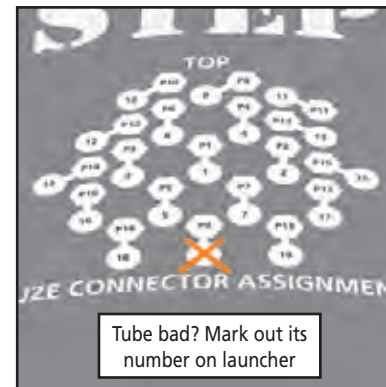
YOUR M260/M261 ROCKET LAUNCHER WILL **ROCK** IF YOU REMEMBER THESE ROCKET TIPS...



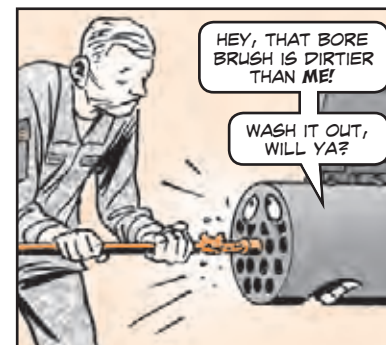
Suspect the contacts. If you load rockets in the launcher, but rockets aren't registering as being loaded, suspect the contacts. Before you spend a lot of time troubleshooting, first try cleaning the contacts in the tubes where the rockets aren't registering. If the contacts are dirty, the rocket doesn't have a good electrical connection, which prevents the launcher from knowing the rocket is loaded.



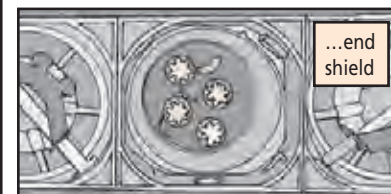
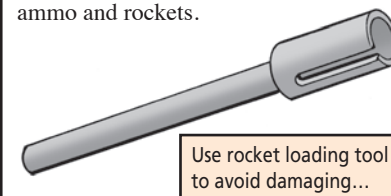
Mark bad tubes. If troubleshooting does turn up a bad tube, mark out its number immediately on the top of the launcher at each end. That way you will remember which tube is bad and will know not to bother loading a rocket in it again.



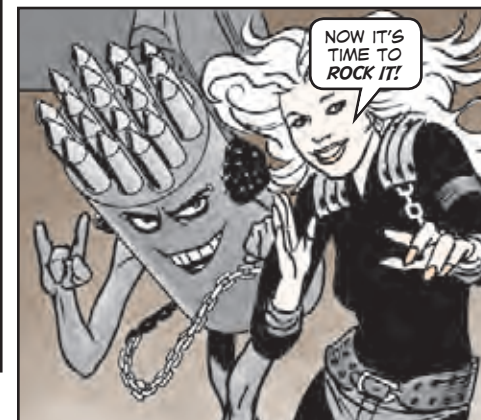
Clean with clean bore brush. It is important to clean out the tubes with CLP and a bore brush. Otherwise, dirt and carbon can cause the rockets to jam. But your cleaning won't do much good if you clean with a dirty bore brush. That just spreads the gunk around. When the brush gets coated with dirt and carbon, give it a good cleaning with soap and water. Let the brush completely dry before using it again.



Use rocket loading tool. Use the tool, NSN 1005-01-536-7961, for loading and unloading rockets. Without the tool, you could jam the rocket in its tube against the rocket stop. Then, when you move the rocket forward to lock it in place, the end shield may be punctured and the igniter wire and weather seal may be damaged. That makes the rocket unusable because of possible exposure to electrostatic discharge and the hazard of electromagnetic radiation (EMR) to ammo and rockets.



If you do damage an end shield, contact your ammo logistics/quality assurance representative or turn in the rocket to the ammo supply point. You're not authorized to replace end shields.



OH-58D...

HANDLING YOUR WHEELS

THANKS, BUDDY!

NO PROBLEM-O!
NOW TO TAKE
CARE OF YOUR
BUDDY.JUST DON'T
LEAVE MY GUN
RESTING ON
MY PIN!

MECHANICS, YOUR
KIOWA WARRIOR'S
GROUND HANDLING
WHEELS (GHW)
SHOULD **NOT**
INTERFERE WITH
ITS WEAPONS **IF**
YOU INSTALL THE
WHEELS RIGHT.



Save yourself a headache and possible aircraft damage by lifting the weapon and stowing it in the up position before you install the GHW.

Some mechanics know that installing the wheels while the rocket launcher and the M296 machine gun are installed is troublesome. The launcher or other weapon systems get in the way when the wheels are put on the aircraft skids.

A common practice is to remove the expandable bolt pin from the universal weapons pylon, lift the weapon, re-insert the bolt pin and then allow the weapon to rest against the bolt pin.

That solution has its own problems. The weapon could slip from your hands and bang against the pin. Even if you're careful and manage to rest the rocket pod or an M296 machine gun on the pin, the pod and gun will eventually bend the pin. And if HELLFIRE missiles are installed, their fins can be damaged by the wheels.

When installing the ground handling wheels, it's best to stow weapons in the up position like it says in Para 4-76 of TM 9-1090-214-23&P. That way you won't be saying "oops" later.

PS 707

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OCT 11

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UH-60A...

Use the Right Tool

I HOPE THIS WILL
WORK ON THE FLOW
VALVE AND NOT ON
MY KNUCKLES!THAT ONE WILL
WORK ON YOUR
NERVES AND
YOUR KNUCKLES
AND NOT MUCH
ELSE!USE
THIS
ONE!

Mechanics, using a hammer and an extension to turn off the main module transmission oil flow is not the way to go.

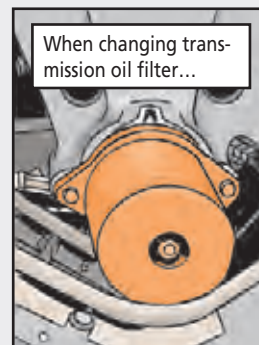
The oil filter flow valve positioner tool and a breaker bar are the right tools to use when changing the transmission oil filter on A Model Black Hawks. Make sure the tool is cinched in properly because you'll need your muscles to turn it.

Some mechanics improvise trying to use the old positioner tool with an extension. They end up with busted knuckles, cuts and abrasions, gouges on the transmission sump case and damage to the filter sleeve tang area.

Using a hammer and extension or the old tool leads to depot level repairs that may include replacing the filter sleeve or even the transmission. The end result is costly downtime and reduced operational readiness.

If you still have the old tool hanging around, don't use it. It requires brute strength and often slips off, causing damage. Make the tool listed in Fig 264 in WP 2014 00 of TM 1-1520-237-23-20.

When changing trans-
mission oil filter...



...use this tool...

...and **not** this one!

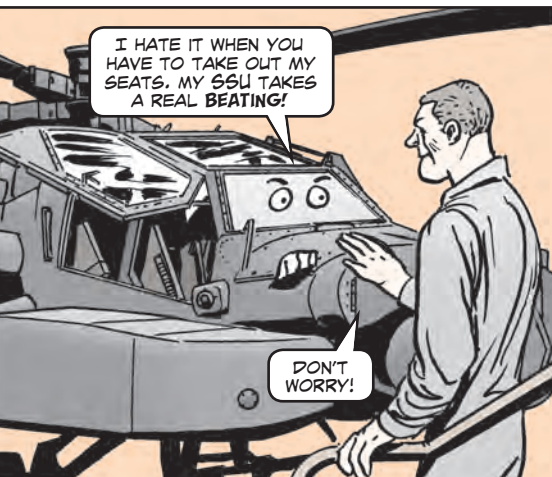
PS 707

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SEAT CAN DAMAGE SSU



Mechanics, one component in your AH-64 that can't take a licking and keep on ticking is the sensor surveying unit (SSU), NSN 1270-01-159-7994.

Pay attention when removing the co-pilot seat because the sensor SSU mounts and the seat are very close. The mounts are not strong and break easily if the heavy seat bangs into them.

The SSU sends signals to the integrated helmet and display sighting system (IHADSS). If the SSU is broken, your helmet will no longer be connected to aircraft weapons and the target acquisition designation sight (TADS).

If the mounts are broken, it's over for your bird. It will be red X'd and won't be flying until the SSU mount gets repaired by a depot maintenance contact team.

The pilot seat is less of a problem because there's more clearance between the SSU and the seat. But, if you're not careful removing the pilot seat, the SSU can suffer damage there, too.

Be careful removing your seats. If you aren't, the SSU will take a licking and stop ticking.



LONG AGO IN
MEDIEVAL TIMES,
A YOUNG SQUIRE
STANDS WATCH...

SOMEDAY I
WILL BECOME
A KNIGHT...
LIKE THE ONE
I SERVE.

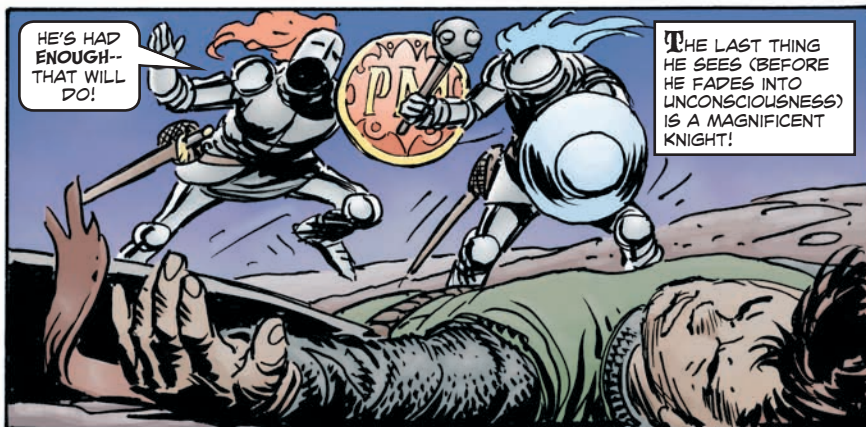
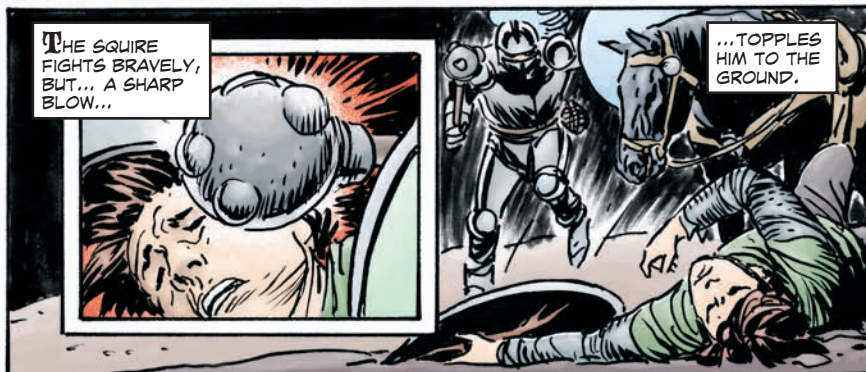
A LIGHT...
OFF IN THE
DISTANCE!
IT IS THE
ENEMY!

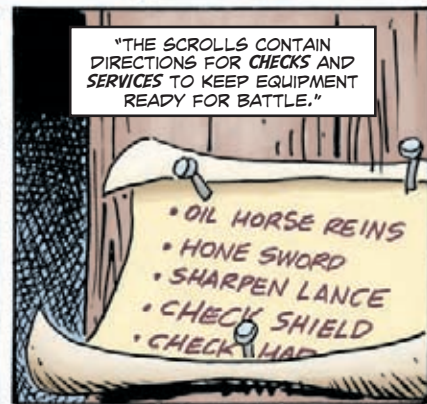
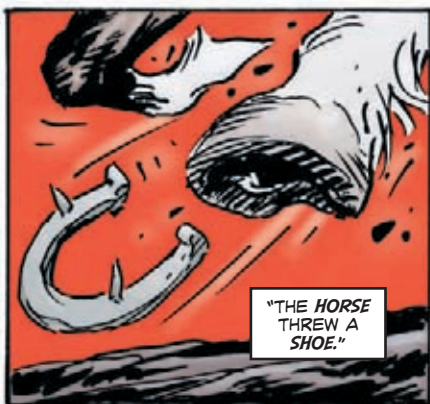
MOMENTS
LATER...

NOW IS MY
CHANCE TO EARN
MY KNIGHTHOOD.

I WILL
VANQUISH
THE FOE...
BY
MYSELF!

Let "PM" Prevail







SOMEDAY, YOU WILL BECOME A GREAT KNIGHT.



BUT YOU HAVE *MUCH* TO LEARN. THIS IS BUT YOUR *FIRST STOP* ON YOUR JOURNEY TO KNIGHTHOOD.



NOW...GET SOME REST.



YEARS PASS AND THE SQUIRE HAS APPLIED HIMSELF TO THE PROPER CARE AND MAINTENANCE OF HIS EQUIPMENT... AND HAS PROVEN HIS BRAVERY IN BATTLE.

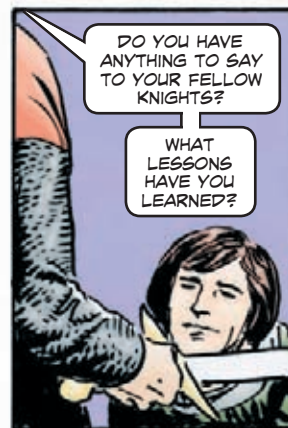


TIME AND AGAIN HIS SHIELD PROTECTED HIM IN COMBAT, WHILE HIS SWORD VANQUISHED HIS ENEMIES.

FINALLY, HIS VICTORIES ARE RECOGNIZED AND HE IS SUMMONED TO BE VESTED AS A FULL-FLEDGED KNIGHT.

YOU ARE INDUCTED INTO THE ORDER OF KNIGHTS.

IN THE GREAT HALL WHERE THE KNIGHTS HAVE GATHERED...



DO YOU HAVE ANYTHING TO SAY TO YOUR FELLOW KNIGHTS?

WHAT LESSONS HAVE YOU LEARNED?



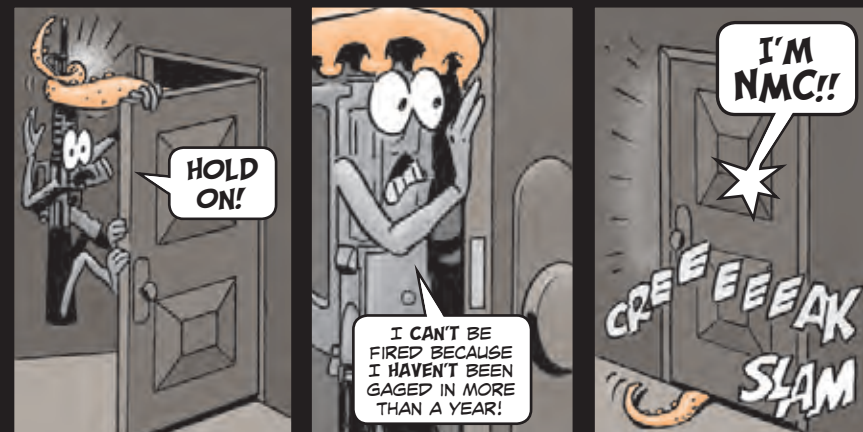
THE MOST IMPORTANT LESSON THAT I HAVE LEARNED IS...



...THE NECESSITY OF *PREVENTIVE MAINTENANCE!*



WHERE IS THE GAGING REQUIREMENT?



Dear Half-Mast,
We have weapons in our unit that haven't been gaged in more than a year. I believe that means they are NMC, but I can't find where it states that in the TMs. The Soldiers in my unit want to fire the weapons and I can't prove to them that they shouldn't.

SSG S.G.

Dear SSG S.G.,

Since you are part of an Active Army unit, you are absolutely right: the weapons shouldn't be fired if they haven't been gaged in more than a year. Every small arms -23&P TM has this statement:

"All Army small arms are to undergo gaging by Direct Support (or equivalent for Aviation units) one year from receipt in accordance with the applicable technical manual. This is NOT a part of initial services to be performed upon receipt of the weapon. **Active Army** small arms will, as a **minimum**, undergo subsequent gaging on an annual (every year) basis. **Guard and Reserve** small arms will, as a **minimum**, undergo subsequent gaging on a biannual (every two years) basis.

These prescribed gaging intervals are, as stated, **the minimum required to assure the safety, operability, and reliability of Army small arms.** Any small arm may be inspected/gaged on a more frequent basis. It is recommended that weapons used in training be gaged after each training cycle has been completed."

In the M16 rifle's TM 9-1005-319-23&P, this statement appears at the beginning of the manual after the General Warnings. It's usually in the same place in the other small arms TMs.

Half-Mast

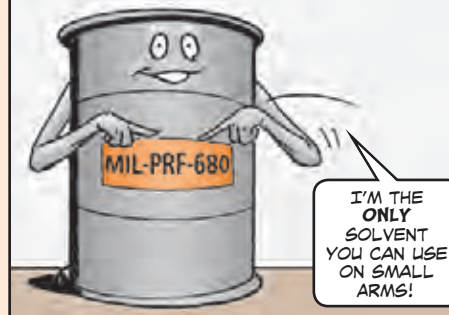
USE CLEANING TANKS WITH CAUTION!



Units would be better off never using cleaning tanks for their weapons, mainly because it's too easy to mix up bolts when many weapons are run through the tanks. If a bolt is used with a weapon it wasn't headspaced for, the receiver can rupture during firing.

But cleaning tanks aren't going away, especially at posts that are dealing with large numbers of weapons during training. Here are a few precautions to help your weapons survive cleaning tanks:

- Use only dry cleaning solvent Type II (81349), MIL-PRF-680. This is the only solvent authorized for small arms. NSN 6850-01-474-2316 brings 55 gallons, NSN 6850-01-474-2317 5 gallons, NSN 6850-01-474-2319 1 gallon, and NSN 6850-00-281-1985 4 1-gal containers.



- Don't clean small arms in the same cleaning tank you use for things like vehicle parts. They may have contaminants that could damage weapons.



- Use a metal basket in the tank to ensure no parts disappear during cleaning.
- When the weapons come out of the tank, they must be completely wiped clean of solvent and allowed to completely dry. But here's the important part: **The weapons must then be completely lubricated before storage.** Solvent removes every bit of lubrication from weapons. If weapons are stored without being re-lubed, count on them being ruined by corrosion.
- Protect yourself from solvent. It's strong stuff. Wear goggles, rubber gloves, and coveralls with the sleeves rolled down.
- Remember that some weapon parts should never be dunked in solvent. Examples are the M2 and M48 machine gun back plates, the MK 19 bolt assembly and anything plastic. Solvent will eat up these parts. Check the operator TMs for info on what parts to keep away from solvent.

M16A4 Rifle, M4/M4A1 Carbine...



BUIS Is Backup... Leave It Alone!

When Soldiers are installing optic sights on their M16A4 rifles and M4/M4A1 carbines, they are removing the backup iron sight (BUIS).

Bad move!

As its name states, BUIS is the backup sight in case something goes wrong with whatever other sight you're using. It keeps you from being sightless in the heat of battle.

Plus, removing the BUIS deadlines your weapon.

So leave the BUIS alone and keep it installed in the rear-most slot on the mounting rail. Install the M68 or RCO-150 sights anywhere but that last slot. That's strictly for the BUIS.

The TMs for the M68 and M150 sights show the sights mounted without the BUIS. That will be corrected in the next update to the TMs.

M16 Buttstock Picture Wrong

The picture of the new M16-series rifle hybrid buttstock PS showed on Page 24 in PS 703 (Jun 11) was wrong. When you order the new buttstock kit, NSN 1005-01-569-6938, it will look like the picture on WP 0021-19 in TM 9-1005-319-23&P.

M120/M120AI,
M121 Mortars...

MORTAR MATTERS THAT MATTER

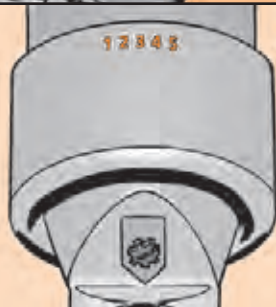
HERE ARE A
FEW RULES
ALL MORTAR
MEN NEED TO
REMEMBER
ABOUT THEIR
M120/M120AI
AND M121
MORTARS...

• If you have an M298 cannon with serial number 11729, you need to report it ASAP to the TACOM POC at the end of this article. TACOM Safety of Use Messages 10-21 and 10-27 identified several M298s that may be unsafe and only the one marked 11729 has not been accounted for.

AH-HA!
YOU'RE THE
INFAMOUS
11729. I NEED
TO REPORT
YOU.



• The M298 cannon breech cap and cannon tube are a matched-for-life set and shouldn't be switched between cannons. The breech cap's firing pin and the cannon's white line must align for the cannon assembly to lock into the baseplate securely. That's why they're matched for life. The serial numbers are stamped on both the breech cap and cannon tube to help you keep track.



Breech cap and cannon tube must stay together. Check serial numbers to make sure you've got the right ones

• According to TB 9-1000-247-34, *Standards for Overseas Shipment of Small Arms Equipment*, the M298 tube can't exceed a bore diameter of 4.757 inches for unit deployment or overseas shipment. You can find other info and requirements on 60-, 81- and 120-mm mortars on Pages 48-49 of TB 9-1000-247-34. The TB is on the ETM site:

<https://www.logsa.army.mil/etms/welcom1.cfm>

• The 120-mm mortar systems with LINs M68405 and M68326 and their M120-mm cannons, NSN 1015-01-522-2630, now require Property Book Unit Supply Enhanced (PBUSE) reporting/Unique Item Tracking (UIT). Check with your property book officer for help.

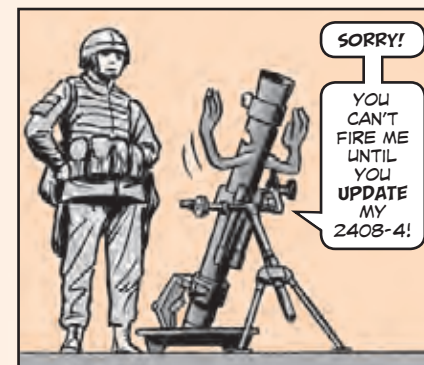
• All mortar cannons must have current *Weapons Record Data* cards, DA Form 2408-4, prior to firing. Soldiers authorized to fill out the card should make sure their Unit Identification Codes (UICs) are current and show only those UICs that they support or are assigned to. For more information on mortars and UICs, see PS 700:

<https://www.logsa.army.mil/psmag/archives/PS2011/700/700-19-20.pdf>



I'M NOT SURE I
UNDERSTAND ALL THIS.
GUESS I'D BETTER
CALL JOE SCHMIDT.

ALWAYS A
GOOD IDEA
FOR MORTARS.



SORRY!

YOU
CAN'T
FIRE ME
UNTIL
YOU
UPDATE
MY
2408-4!



IF YOU HAVE
MORTAR
QUESTIONS
LIKE THESE
GUYS, CONTACT
TACOM'S JOE
SCHMIDT AT
DSN 786-1216,
(586) 282-1216,
OR EMAIL:
joe.schmidt@us.army.mil

M249 Machine Gun...

Should Both Barrels Be ID'ed?

Dear Half-Mast,
There is no requirement in the M249 machine gun TMS for both barrels to be ID'ed for the receiver they are headspaced for. Shouldn't this be an official requirement since it's critical that Soldiers *not* use a barrel that hasn't been headspaced for that receiver?

CW4 J.F.

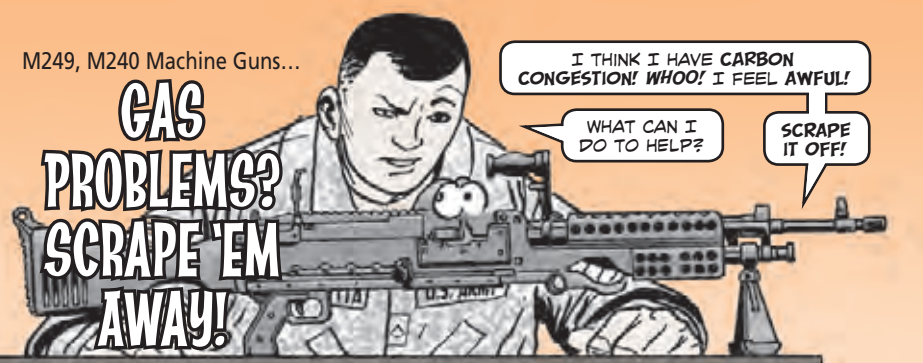
Dear Chief J.F.,
Yes, barrel marking *should* be an official requirement. This will be added in the next change to TM 9-1005-201-23&P. The best way to ID the barrels for both the M240 and M249 machine guns is to safety-wire a dog tag underneath the barrel's heatshield. Make sure the wire ends don't stick out where they can poke someone.

You can also paint the number on the barrel. What you *don't* want to do is engrave the number on the barrel. That ruins the barrel's finish, which leads to corrosion and a ruined barrel.



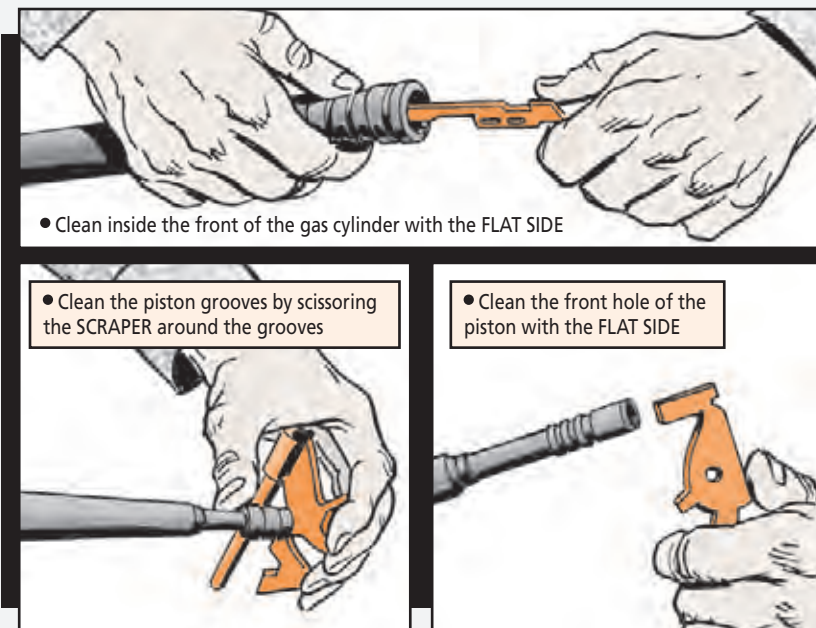
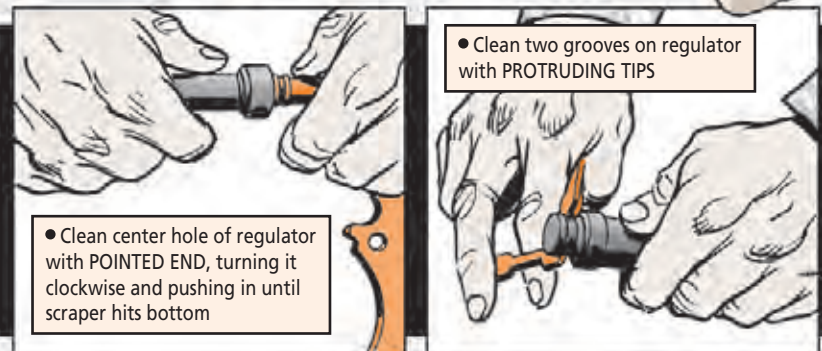
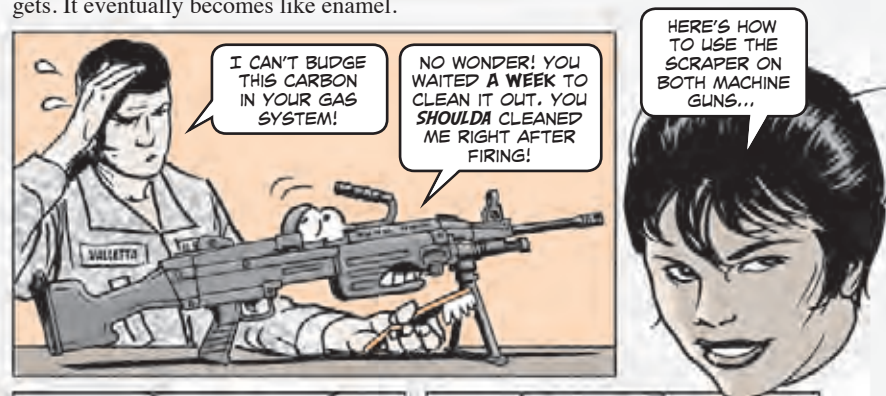
Half-Mast

GAS PROBLEMS? SCRAPE 'EM AWAY!



If carbon is allowed to build and build inside the gas systems of the M249 and M240 machine guns, they fire slower and slower and then not at all.

The key to gas relief for both machine guns is the scraper. Each scraper part is designed to scrape away carbon from different parts of the gas system. And the sooner you use the scraper, the easier the job is. The longer carbon sits, the harder it gets. It eventually becomes like enamel.



For the chamber, use the chamber brush and CLP. If your M249 or M240 has trouble extracting, a quick cleaning of the chamber usually fixes the problem.

CLP does a good job of cleaning off carbon, but it also does a good job of collecting carbon. So never use CLP—or any of the other lubes—on the barrel's gas regulator hole, the gas regulator, the gas cylinder, or the op rod's piston end. Clean carbon off those parts with the scraper only—no CLP.

It's OK to use CLP to clean the barrel, the chamber, the rest of the op rod, and the bolt face, but wipe them dry before firing.

Another excellent way to fight carbon in the gas system is to change the barrel on both the M249 and M240 when you're supposed to. For the **M240**, that means changing barrels every 10 minutes during sustained fire (100 rounds per minute) and every two minutes during rapid fire (200 rounds per minute).

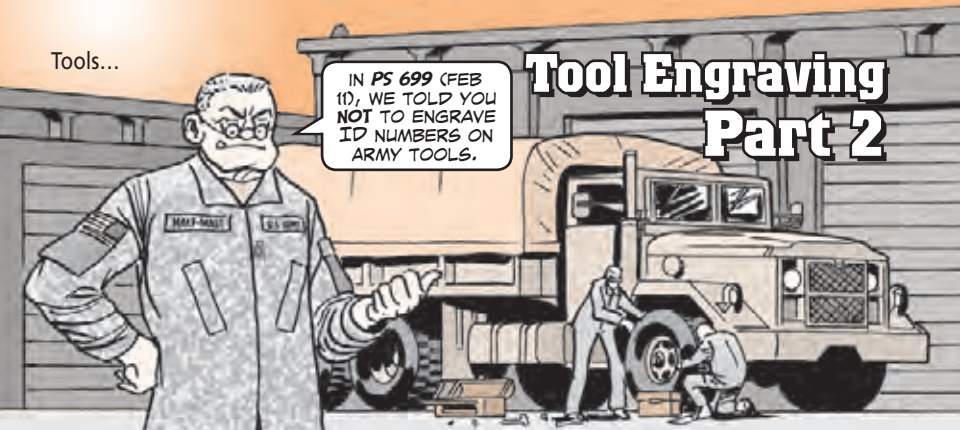
For the **M249**, during both sustained fire (40 rounds per minute) and rapid fire (100 rounds per minute), change the barrel every 200 rounds.

What you **don't** want to do with the **M240** is change the gas regulator setting from #1. The #2 setting produces much more carbon in the gas system. The #2 setting should be used only in combat emergencies.

If your scraper and elbow grease just won't clean out all the carbon, ask your armorer for help.

Leave M240 set at #1 except in emergencies





Why? Many Army tools have a lifetime warranty, which means they're replaced for free if they're damaged or broken. In some cases, engraving or laser etching ID numbers on tools voids that warranty. So that means if something goes wrong with the tool, you could be stuck with the replacement cost.

Several readers wrote to PS that you should definitely engrave ID numbers on tools to help keep track of them. One reader pointed out that TC 3-04-7, *Army Aviation Maintenance*, says: "Paint, etch, tape, or mark all tools for easy identification during inventories."

But, unfortunately, that doesn't change the fact engraving or etching tools may void their lifetime warranty.

One possible solution is to pay the tool's manufacturer to engrave the ID numbers on the tools. That leaves the warranty in effect. And it turns out some tool manufacturers say it's OK to engrave or etch the tools without affecting the warranty.

So when you're considering the best way to ID your tools, first check with the manufacturer to see if engraving the tools will affect the warranty. If it will, ask the manufacturer what they charge for doing the engraving. If that's more than you want to pay, you're left with the alternatives of painting or taping the ID number on the tool. Some units are also putting bar codes on tools.

Not sure which of your tool sets have lifetime warranties? PS 655 (June 07) listed many of the sets, kits and outfits (SKO) that have lifetime warranties. You can view the story at:

<https://www.logsa.army.mil/psmag/archives/PS2007/655/655-28-29.pdf>

For more current SKO info, go to:

<https://pmskot.army.mil/>



Replacing Tools Under Warranty

If you do break a tool that's under warranty through normal use, you can usually get it replaced within a couple of business days. Here's how:

- Go to the PM SKOT link on the previous page.
- Click on CONTINUE and then on REPLACEMENT/WARRANTY. That brings you to the link that has both tool warranty and replacement links. For a warranty claim, click on the warranty link and enter the requested info.

If you need to replace a tool broken through abuse or one that's been lost or stolen, get it through the replacement process. That way PM SKOT can give you worldwide Army support. Click on the replacement link and enter the tool and credit card or MIPR info. If you don't have a unit credit card, click on the PM SKOT link for further instructions.

If you have tool questions of any kind, call toll free 1-877-4PM-SKOT (1-877-476-7568) or email: DAMI_PM-SKOT@conus.army.mil

Tool Warranty Often Good for Marines



Dear Half-Mast,

I have read in PS that many of the Army's sets, kits and outfits (SKO) have lifetime warranties that will provide replacement of tools that break during normal use. I was wondering if the warranty also applies to tools the Marines purchase through PM SKOT.

SFC M.B.

Dear Sergeant First Class M.B.,

Yes, the warranty is good for tools Marines purchase through PM SKOT. But Marines cannot purchase all the SKOs available through PM SKOT. To see which SKOs are authorized for Marines, check USMC Supply Instruction (SI) 10510-OR (publication control number 16410510000), which is online:

<https://pubs.logcom.usmc.mil/front.htm>

To obtain tool warranty and replacement info, go to: <https://pmskot.army.mil>
Click on REPLACEMENT/WARRANTY to bring you to the page that has both replacement and warranty links.

PS 655 (Jun 07) published a list of many of the SKOs that have lifetime warranties. It's online:

<https://www.logsa.army.mil/psmag/archives/PS2007/655/655-28-29.pdf>

Half-Mast

CBRN SOURCES ONLINE

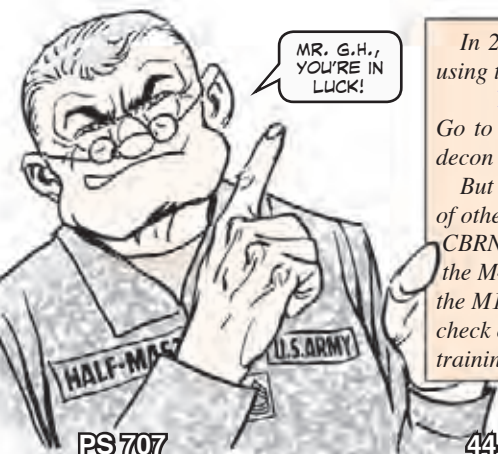


Dear Half-Mast,

We help train Soldiers on CBRN equipment and we've run into a couple of problems we hope you can help with:

- The only training film we have on deconning is very old. Are there any films more recent?
- TC 3-8 used to cover how to conduct gas chamber exercises for masks, but it was rescinded. Its information was supposed to be added to AR 350-1, *Army Training*, but it wasn't. Where can you go for guidance on doing the gas chamber exercises?

G.H.



In 2009, a new training video came out on using the M12 decon. You can order it online:

<http://www.defenseimagery.mil>

Go to Learning Resources and type in "M12 decon apparatus".

But the Defense Imagery site has a wealth of other training material on all kinds of CBRN and other Army equipment, including the M40 mask, M41 PATS, the ICAM, and the M17 decon. CBRN specialists need to check out the site for material they can use in training their unit.

CBRN Knowledge Network

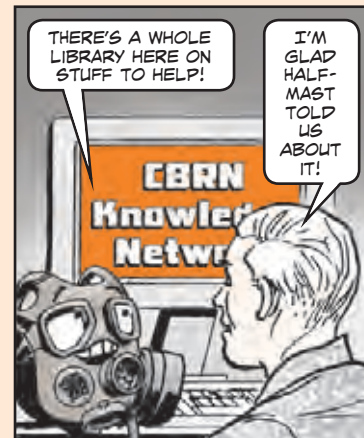
Concerning your question about info on gas chamber exercises, the US Army CBRN School at Ft Leonard Wood, MO, has put out instructions for doing the exercises. Go to their CBRN Knowledge Network site:

http://www.wood.army.mil/wood_cms/usacbrns.shtml

Then click on CBRN Knowledge Network Website. You will need to use your CAC card to log in. Under DOTMLPF, click on Training and click again on CBRN Collective Training. Then click on the file Mask Confidence Training. This gives you a training program developed and approved by the US Army CBRN School.

But don't stop there. The site also offers:

- **CBRN Specialist (MOS-T) Course (Phase 1)** online access instructions
- **US Army CBRN School Training Support**—This site contains training materials used by the school to train CBRN Warfighters.
- **CBRN Collective Training**—This site contains CBRN materials for unit training.
- **CBRN Soldier Training**—This site offers tools, resources and information for Soldier training that includes critical tasks.
- **Standards in Training Commission**—The site assists units in developing weapons training strategies and requirements.



Half-Mast

Get a Safe Handle on Fueling. PART I

IT'S RISKY
BUSINESS,
HANDLING
FUEL...

...OPEN FLAMES, STATIC
ELECTRICITY OR SPARKS
CAN SET OFF FIRES AND
EXPLOSIONS...



...LIQUID FUEL CAN
IRRITATE YOUR SKIN
AND EYES...



...IN COLD
WEATHER, SUPER-
COOLED FUEL CAN
INFLECT FROSTBITE
ON BARE SKIN.



ALL GOOD REASONS
TO PRACTICE **SAFETY**
WHEN YOU'RE WORKING
AROUND YOUR M978
HEMTT TANKER.



Dress the Part

FUEL
HANDLERS,
MAKE SURE
YOU'RE
DRESSED FOR
THE PART
BY WEARING
PERSONAL
PROTECTIVE
EQUIPMENT
(PPE)...



- Industrial safety goggles with a seal that holds them snugly against your face.
- Fuel handler's gloves.

Size	NSN 8415-01-529-
Small	2612
Medium	2618
Large	2621
X-large	2624
XX-large	2638

Fuel
handler's
glove



- Cold weather petroleum handler's gloves

Size	NSN 8415-01-
X-small	475-9987
Small	466-3531
Medium	466-3586
Large	466-3587
X-large	475-9981

Cold
weather
petroleum
handler's
glove



- Hearing protection you'd normally wear in your shop or motor pool.
- You might even think about ordering a fire-resistant lightweight performance hood, NSN 8415-01-576-7524. It protects your face, ears and neck.

PMCS in the TMs

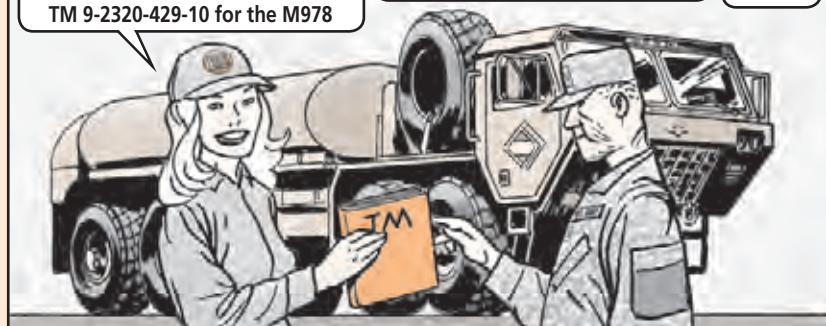
BEFORE HANDLING FUEL, DO THE
BEFORE PMCS BY THE BOOK. SEE
CHAP 4 OF THESE MANUALS...

TM 9-2320-339-10 for the M978A4
TM 9-2320-348-10 for the M978A2
TM 9-2320-429-10 for the M978

YOU'LL FIND THE TMS ON THE
USAMC LOGISTICS SUPPORT
ACTIVITY ETMS ONLINE WEBSITE...

[https://www.logsa.army.mil/
etms/online.cfm](https://www.logsa.army.mil/etms/online.cfm)

YOU'LL
ALSO
FIND
THEM
ON EM
003B.



Liquid and Vapor

Fuel leaks do more than waste resources and foul the environment. They're a fire hazard. A hot engine can ignite leaking fuel. Clothing wet with fuel can catch fire from the static electricity on your body and clothes. Metal scraping pavement causes sparks that can also set fuel ablaze.

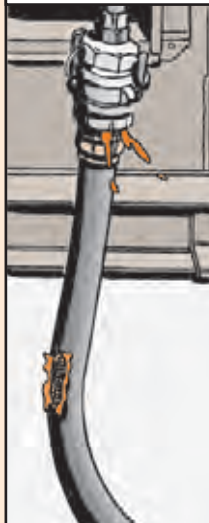
Inspect the fuel servicing hose for holes, tears or dry rot—prime places where leaks occur. Make sure the fuel service nozzle has a gasket. Inspect it for tears, cracks or dryness. Clean up any leaks you find around your truck. Ask field-level maintenance to replace or repair leaking equipment.

See to it your unit has an SOP for fuel leaks and spills. It's not enough to know the SOP. You need to practice it. Always keep a spill kit on your HEMTT. Make sure the kit has absorbent pads, pillows, socks and dry sweep.

One more thing: When you use the fuel service nozzle, put a drip pan under it to catch overflow or drips.

Fuel leaks you can spot. **Fuel vapors** you can't. You've got to sniff them out. Liquid fuel evaporates, forms vapors and mixes with air. It's especially dangerous in areas that are poorly ventilated. Even an empty fuel tank may still have some lingering vapors mixed with air. Add a flame or spark to the mix and it could explode.

Look at fuel hose for
leaks, holes and tears



BE ALERT
TO LIQUID
FUEL LEAKS
AND FUEL
VAPORS
AROUND
YOUR
TANKER.



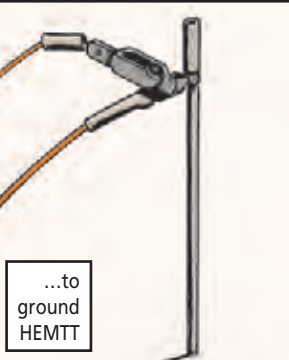
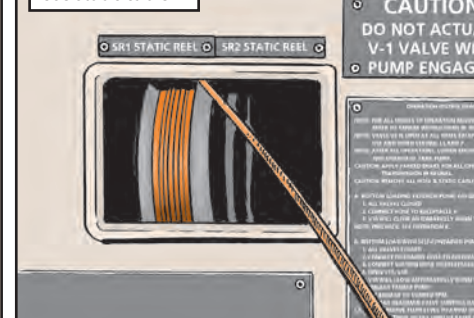
Static Electricity

One of the greatest dangers around fuel trucks is static electricity. An electrical charge can build up from the flow of fuel through hoses and pumps, and into and out of metal tanks. If the charge becomes too great, it can spark. And that spark might set off a fire or an explosion. That's why you need to bond and ground your vehicle before handling fuel.

Bonding is when you electrically connect two objects to make the static charges on them equal. For example, before you fuel or defuel a vehicle from a HEMTT tanker, connect one of the HEMTT's static cables to the vehicle being fueled.

Grounding is when you electrically connect a single vehicle or two bonded vehicles to a ground rod. In this case, you'd connect one of the HEMTT's static cables to the rod.

Use static cable...



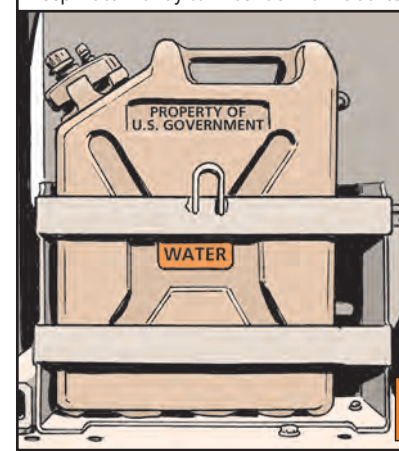
Fuel handlers should inspect the static cables and connections daily. Same goes for the ground rod.

Static electricity can also build up on you and your clothes, especially if they're nylon or wool. Taking off charged clothes or tugging at them could unleash a spark. If the clothes are wet with fuel, they could burst into flames. (Nylon clothes have another drawback: If they catch fire, they melt.)

Keep a 5-gal water can on your truck. You'll need it if fuel splashes on you. Use water to rinse fuel off your clothes before you strip down. Also use it to flush your eyes and skin as needed.

Next month, PS 708 will present the second and final part in this series about safe fuel handling. Part II will discuss night fueling, placards, smoking, sources of ignition, fire extinguishers and education.

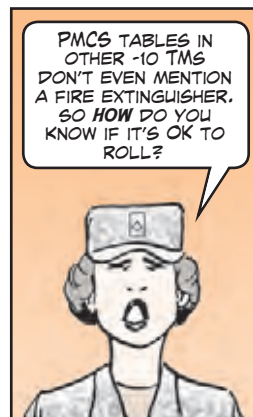
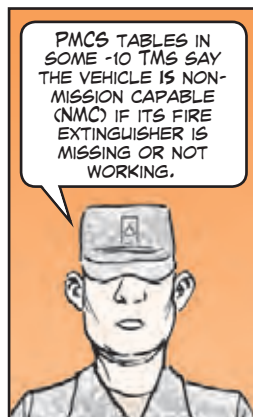
Keep water handy to rinse fuel from clothes



PS
END

Fire
Extinguishers...

MISSION CAPABLE, STRICTLY SPEAKING?



According to TACOM, here are the guidelines:

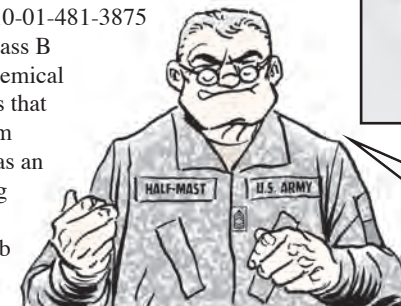
- If the TM lists the fire extinguisher as a **basic issue item (BII)**, it's required gear. It must be operational and with the vehicle at all times. Otherwise, the vehicle is NMC. It must be deadlined until it gets an operating fire extinguisher.
- If the TM includes the fire extinguisher on the **additional authorization list (AAL)**, then it's not required gear. Your vehicle is fully mission capable even if the fire extinguisher is missing or not working.

Of course, if your vehicle's main job is to haul passengers or flammable materials, you should always carry a fire extinguisher. Get a class B and C multi-purpose extinguisher. It's made to put out flammable liquid fires and electrical equipment fires.

Check out your TMs for recommended portable, hand-held fire extinguishers. If the TMs don't list any, consider one of these:

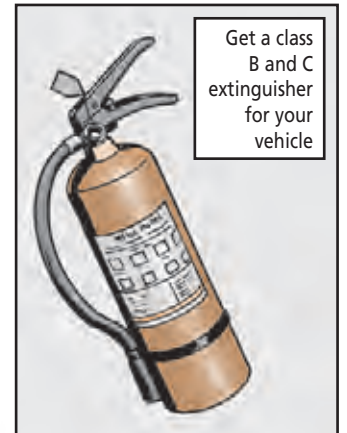
- NSN 4210-01-149-1356
- NSN 4210-01-189-6452
- NSN 4210-01-481-3875

They're class B and C dry chemical extinguishers that use potassium bicarbonate as an extinguishing agent. Each one has a 5-lb capacity.



FOR MORE INFORMATION, SEE TB 5-4200-200-10, **HAND PORTABLE FIRE EXTINGUISHERS APPROVED FOR USERS.**

Section III. BASIC ISSUE ITEMS (Cont'd)			
Stock Number	Description CAGEC and Part Number	(A)	Usage On C
809-0404	BINDER, LOOSE-LEAF: equipment log book, 6-7/20 in. x 9-1/2 in. (in pamphlet bag) (19007) 11677003		
149-1356	FIRE EXTINGUISHER, hand, type 1, class 2, 5 lb. capacity, w/bracket (mounting location per unit commander discretion) (for bracket only, notify unit maintenance) (18207) 12215633-1		*A2
481-3875	FIRE EXTINGUISHER, hand, type 1, class 2, size 5 (mounting)		*A2



AR 750-6 Revised

A revision to AR 750-6, *U.S. Army Equipment Safety and Maintenance Notification System*, went into effect in Dec 2010. This rapid revision updates the current command activity names of Army service component commands and direct reporting units. It also assigns responsibility to the Army DCS G-4 to organize and convene an Army Safety Action Team (ASAT) when material risk is determined to be high on any piece of Army equipment, in accordance with AR 385-10, *The Army Safety Program*. It's available on the Army Publishing Directorate's website:

http://www.apd.army.mil/pdf/files/r750_6.pdf

No Field Days with DA Form 2404

HEY, CHECK OUT THIS COOL CHECKLIST I MADE FOR DA FORM 2404!

NOW WE CAN BREEZE RIGHT THROUGH PMCS ON THIS PUPPY!

UHHH... I'M NOT SURE WE'RE S'POSED TO TAMPER WITH THAT FORM. BETTER ASK HALF-MAST.

Dear Half-Mast,

DA Pam 750-8, *The Army Maintenance Management System (TAMMS) Users Manual*, shows examples of how to use DA Form 2404 for PMCS, quarterly inspections, annual services, battlefield damage assessment and repair and estimated cost of damage. My concern is with the proper use of section 10c, "Deficiencies and Shortcomings."

I think only those examples listed should be included in 10c. But I have seen some units turn column 10c into a checklist. For example: "Inspect tank, pump and plumbing for leaks." Is this permitted?

Mr. A.A.

MR. A.A., WE'VE RECEIVED SIMILAR INQUIRIES FROM OTHER READERS, SO THIS SEEMS TO BE A COMMON CONCERN.

HQDA G-4 TELLS US A FORM IS **NOT** CONSIDERED ALTERED OR MODIFIED AS LONG AS IT'S BEING USED FOR ITS INTENDED PURPOSE.

FOR EXAMPLE, IF A UNIT WANTS TO FILL IN INSPECTION CHECKS OR SERVICES INFORMATION ON DA FORM 2404 AND PRINT IT LOCALLY, THAT FALLS WITHIN GUIDELINES.

IMPROPER FORM MODIFICATIONS INCLUDE THINGS LIKE CHANGING FORM FIELD TITLES. FOR EXAMPLE, CHANGING THE ORGANIZATION BLOCK TO READ CORPORATION OR MOVING AROUND THE DATA FIELDS WOULD INVALIDATE THE FORM.

EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET									
For use of this form, see DA Pam 750-8, the program agency is GSC, G-4									
1. ORGANIZATION		2. REGISTRATION/GENERAL INFO		3. MILES		4. HOURS		5. PLANTS	
CORPORATION									
6. TM NUMBER		7. DATE		8. APPLICABLE REFERENCE		9. TM NUMBER		10. DATE	
COLUMN a - Enter TM item number.		COLUMN b - Enter the applicable condition status symbol.		COLUMN c - Enter deficiencies and shortcomings.		COLUMN d - Show corrective action shortcoming listed in Column c.		COLUMN e - Individual ascertain action initial in this column.	
"X" - Indicates a deficiency in the equipment that places it in an inoperable status.		Circled "X" - Indicates a deficiency, however, the equipment may be operated under specific limitations as directed by higher authority or as prescribed locally, until corrective action can be accomplished.		HORIZONTAL DASH "-" - Indicates that a required inspection, component replacement, maintenance operation, check, or test flight is due but has not been accomplished, or an overdue MWO has not been accomplished.		STATUS SYMBOLS		DIAGONAL "Y" - Indicates a deficiency which must be efficiency or to make the item co-	
								LAST NAME INITIAL IN BLACK, B OR PENCIL - Indicates that a condition exists.	
								FOR AIRCRAFT - Status symbols	
ALL INSPECTIONS AND EQUIPMENT CONDITIONS RECORDED ON THIS FORM HAVE BEEN IN ACCORDANCE WITH GUIDELINES, PROCEDURES AND STANDARDS IN THE TM.									

FOR DETAILED GUIDANCE ON FORMS, SEE DA 25-31, *FORMS MANAGEMENT, ANALYSIS AND DESIGN*. PARA 1-9 COVERS STEPS FOR GETTING NEW FORMS OR MODIFICATIONS APPROVED:

http://www.apd.army.mil/pdf/files/p25_31.pdf

IT'S A GOOD IDEA FOR YOU TO CHECK WITH THE LCMC RESPONSIBLE FOR THE PIECE OF EQUIPMENT YOU ARE SERVICING.

THEY MAY ALREADY HAVE AN APPROVED VERSION OF DA FORM 2404 YOU CAN USE THAT IS EQUIPMENT-SPECIFIC.



IN THAT CASE, WHY REINVENT THE WHEEL?

POWER GRID TRAINING PLUGS SAFETY

ELECTROCUTIONS IN THEATER ARE HAPPENING!

THESE DEATHS ARE SAD AND WERE PREVENTABLE.

Bullets and bombs are not the only threats in a war zone. Something as simple as taking a shower or washing a vehicle can end in tragedy. Several Soldiers have died from electrocution, and others have been injured in power-related incidents.

These kinds of tragedies are caused by overloaded circuits, inadequate extension cords or improperly emplaced grounds in the power system. Following safety procedures could have prevented such disasters.

NOW THERE'S A POWER GRID TRAINING COURSE THAT TEACHES PROPER INSTALLATION OF THE CENTRAL POWER SOLUTION!

Frayed wiring plus overloaded lines equals potential disaster

It's easy to assume that when outlets are available there is sufficient electricity, too. However, the central power solution (CPS) was developed to provide tactical power grids that supply power to new, power-hungry technologies. Many servicemembers do not know how to emplace power grids properly. Proper installation of power grids can prevent electrical fires and save lives.

The Communications-Electronics Command-Life Cycle Management Command (CECOM-LCMC) Information Technology Field Service Branch (IT-FSB) Tactical Power Integration Team (TPIT) now offers a 2-week power grid training course that teaches Soldiers how to install the CPS properly. This is important because CPS installation does not currently fall under any military occupational specialty.

Put safety first by learning right way to set up power structure



THE FIRST WEEK OF TRAINING COVERS...



- Electrical safety, basic electrical theory, units of measurement, electrical symbols, Ohm's Law, electrical math, AC (alternating current) and DC (direct current) circuits, single-phase and 3-phase power, computing neutral current, load calculations and load balancing
- Introduction to the National Electrical Code
- Sizing of conductors, current draw and voltage drop, circuit breakers and fuses, tools, and use of test equipment (such as multimeters, ammeters and ground resistance testers).

THE SECOND WEEK INCLUDES HANDS-ON TRAINING WITH POWER PLANTS AND ELECTRICAL DISTRIBUTION SYSTEMS AND IT COVERS...



- Grounding and bonding methods
- Preventive maintenance checks and services, safety, paralleling procedures (how to parallel generators to create backup power and uninterrupted power transfer)
- Troubleshooting, power plant emplacement, power distribution illumination systems electrical (PDISE) set up, designing and connecting the power grid, and the differences between generator models.

This training will be given to some units during rotations to the Joint Readiness Training Center (JRTC) at Ft Polk, LA, or the National Training Center (NTC) at Ft Irwin, CA.

However, any unit can request power grid training from CECOM's IT-FSB TPIT by calling DSN 738-5505, (254) 288-5505, or emailing:

david.chapman1@us.army.mil

Safety...

WALK THE LINE WITH IEDES

ANCIENT
ROME...

OUM-
05-6920-
703-10

BEWARE
THE IEDES!

GRATIAS, BRUTUS
CAUTIONUS, BUT
I NEED NOT FEAR
THE IEDES.

FOR VERILY,
I HEED ALL
THE SAFETY
WARNINGS IN
HERE.

THE IMPROVED
EXPLOSIVE
DEVICE EFFECTS
SIMULATOR
(IEDES) IS
A POWERFUL
TRAINING TOOL.

IEDES WAS
SPECIALLY
DESIGNED TO
TRAIN SOLDIERS
HOW TO DEFEAT
EXPLOSIVE
DEVICES.

HOWEVER, SETTING UP, HANDLING
OR BREAKING DOWN THE DEVICE
WITHOUT FOLLOWING PROCEDURES
IN THE OPERATOR'S MANUAL OR
USING THE INCLUDED SAFETY
GEAR IS **DANGEROUS!**

IEDES kits contain lots of parts, and all of them should be handled carefully. Use **extreme** caution when handling the Pyrotechnic Scalable Signature Device (PSSD). This 32-shot magazine-based launcher uses M30/M31 cartridges, so handling it without safety gear could result in serious injury to yourself or others.

The PSSD should **never** be powered on or armed during set up, break down, or while loading or unloading cartridges.

If the PSSD is detonated while anyone is closer than the required safety standoff distance, it can cause injury from noise, fragmentation and hazardous material.

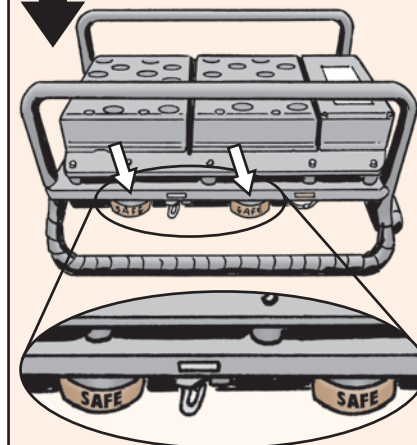
You should find the safety gear needed for handling IEDES in the transit case that was fielded with the device. Both the A-Kit, NSN 6910-01-572-4917, and B-Kit, NSN 6910-01-572-4925, contain specialized face visors, gloves and hearing protection.

If some or all of your safety gear is missing, contact your installation's training safety coordinator to get replacements.

When IEDES is first fielded to your unit, a trainer will demonstrate proper handling procedures. However, be sure to read the list of warnings and follow the set up/handling/break-down instructions in the operator's user manual, OUM-05-6920-703-10 (Mar 2010). If your original OUM is missing, contact the IEDES project director, Ron Inmon, at DSN 970-3364, (407) 208-3364, or email:

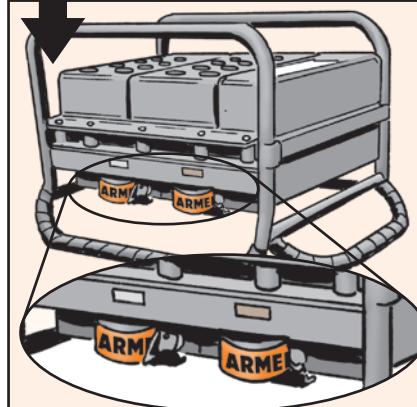
ron.inmon@us.army.mil

All four "SAFE/ARM" wheels are color-coded with GREEN side for "SAFE" and RED side for "ARMED". When PSSD is in "SAFE" mode, all 4 wheels should be turned with GREEN indicators facing out



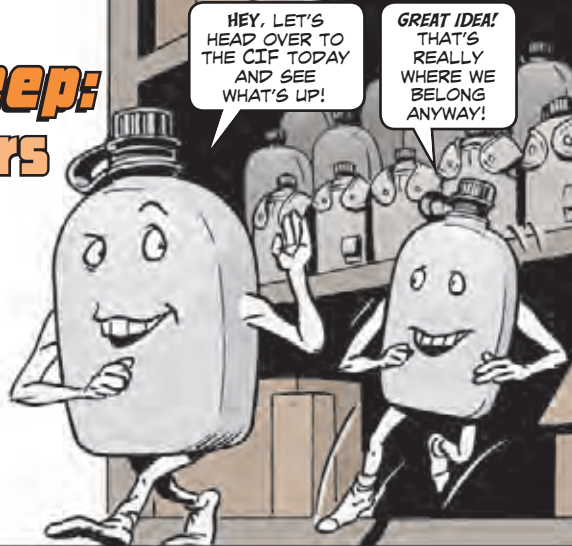
NOTE: Wheels are on **both** sides of PSSD

When PSSD is in "ARMED" mode, all 4 wheels should have RED warning indicators facing out



NOTE: Wheels are on **both** sides of PSSD

Clean Sweep: Commanders Can Move Centrally Managed OCIE off Books



The Army reports that some centrally managed organizational clothing and individual equipment (OCIE) is showing up in PBUSE.

Generally, units should not buy or stock centrally managed OCIE issued by Central Issue Facilities (CIFs). Too often, OCIE accountability is lost during change of commands and deployments. Loss of visibility can also mean money down the drain if a unit reorders OCIE it already has.



The complete list of OCIE that can be transferred from PBUSE to the installation support module (ISM)-CIF contains more than 300 items.

Unit commanders, here's a chance to scrub your property books. You can move centrally managed OCIE out of PBUSE, get it off your unit's property book and help the Army redistribute supplies.

Best of all, moving centrally managed OCIE to your supporting CIF can also free up your unit supply personnel. They'll no longer have to maintain, manage or account for all these items!

Note: Before transferring any centrally managed items to your CIF, give them your lateral transfer documentation and set a date for the actual transfer to occur. A lateral transfer is not considered complete until property accountability is transferred to the supporting/gaining CIF, and accounted for in the ISM-CIF. The CIF will transfer OCIE items to the Soldier's ISM-CIF clothing records.

For OCIE items already issued or hand-receipted to a Soldier, transfer the items to the ISM-CIF, then note the transfer in the Soldier's ISM-CIF clothing record. The Soldier must sign the updated clothing record to finish the transaction.

To see the complete list of centrally managed OCIE, with LINs and NSNs, login to AKO: <https://www.us.army.mil/suite/doc/25856454>

For more information, email the following:

Active Army Lillie Vinson lillie.p.vinson@us.army.mil	National Guard CW4 Kenneth Gildner kenneth.gildner@ng.army.mil
Reserves Mr. Michael Nixon michael.nixon@usar.army.mil	Central Management Office Mr. Amit Saigal amit.k.saigal.civ@mail.mil

How Many Back Issues of PS?



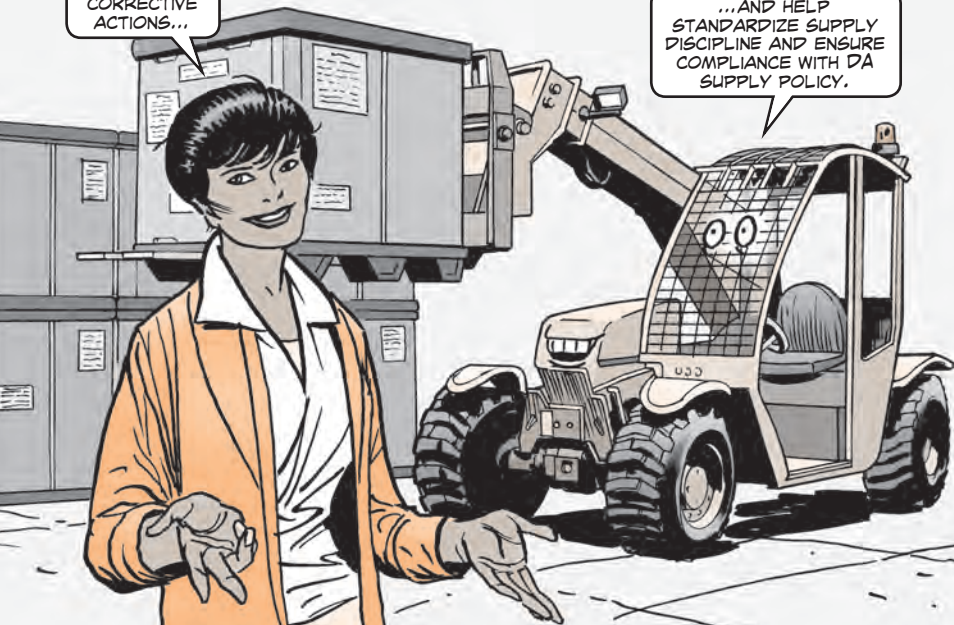
Sometimes units ask us how many years of *PS Magazine* they need to keep on hand. We recommend keeping the last three years, unless your local command says otherwise.



CALL Handbook Gives CSDP Pointers

THE CSDP CAN IDENTIFY LOGISTICAL PROBLEMS AND ALLOW FOR TIMELY CORRECTIVE ACTIONS...

...AND HELP STANDARDIZE SUPPLY DISCIPLINE AND ENSURE COMPLIANCE WITH DA SUPPLY POLICY.



With the Army's growing focus on property accountability, it's more important than ever for each unit to establish and enforce their Command Supply Discipline Program (CSDP).

The Center for Army Lessons Learned (CALL) offers a helpful handbook to assist leaders in setting up their unit's CSDP and reducing fraud, waste and abuse.

The Small Unit Leader's Guide to the Command Supply Discipline Program tells unit leaders how to:

- Implement the CSDP in the unit, step-by-step.
- Understand various property types and establish accountability for each type.
- Document the loss, damage, or destruction of government property through the FLIPL (financial liability investigation of property loss) process.
- Understand maintenance and supply readiness and how it can affect the unit's ability to perform its assigned mission.

To view or download a pdf of the handbook, visit the CALL website:

<http://usacac.army.mil/cac2/call/docs/10-19/10-19.pdf>



CONTACT CORRECTION FOR SAMS-E HELP

On Page 53 in PS 704 (Jul 11), the contact information for the Automated Logistics Assistance Team (ALAT) in Afghanistan Bagram (North) should be: DSN (318) 431-4490/4493 and email:

bgrmalat@afghan.swa.army.mil

Also, the ALAT-Iraq facility closed on September 1, 2011.

LOGSA Updates ETM CD-ROM/DVD Labels

The USAMC Logistics Support Activity (LOGSA) is updating CD-ROM/DVD labels on all electronic technical manuals (ETMs). Starting September 1, 2011, the new labels will include the current Army Chief of Staff's name and the signature of the current Administrative Assistant to the Secretary of the Army, which are required on all DA-authenticated technical manuals (paper or electronic format.) The new labels mean it's no longer necessary to keep the mailers that your disks came in to prove you have official, DA-authenticated CD-ROMs/DVDs. Questions? Contact ETM Customer Service at DSN 645-0809, (256) 955-0809, or email:

logsa.logetm@conus.army.mil

New Fuel Solenoid Diode Assembly for HMMWVs

If your HMMWV's fuel solenoid diode assembly, NSN 5961-01-180-5634, shorts out, do this. Replace it with the new flyback diode assembly, NSN 5961-01-593-3791. This assembly has a blue protective shrink sleeve; the old one has a black one. You'll see both assembly NSNs in a future TM change.

CONTAINERIZED KITCHEN'S WINCH, DRUM ASSEMBLY

The NSN, part number and description for the containerized kitchen's winch, drum assembly, shown as Item 1 in Fig 2 of TM 10-7360-226-13&P (Aug 01, w/Ch 4, Mar 07), are *wrong*. They've changed to:

NSN 3950-01-511-1191

Part number 50390-201

Decription PARTS KIT, WINCH

The CAGE remains the same. Make a note until the TM is updated.

M1165A1 HMMWV Windshield NSNs

The HMMWV parts manual doesn't list windshield information for M1165A1 up-armored HMMWVs yet. So use NSN 2510-01-560-1159 to get the driver's windshield. And NSN 2510-01-561-2540 brings the passenger windshield. Order both with CAGE code 34623.

DISTRIBUTION: To be distributed in accordance with the initial distribution number (IDN) 340312, requirements for TB 43-PS-Series.

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